FRANK LESLIE'S
POPULAR MONTHLY.

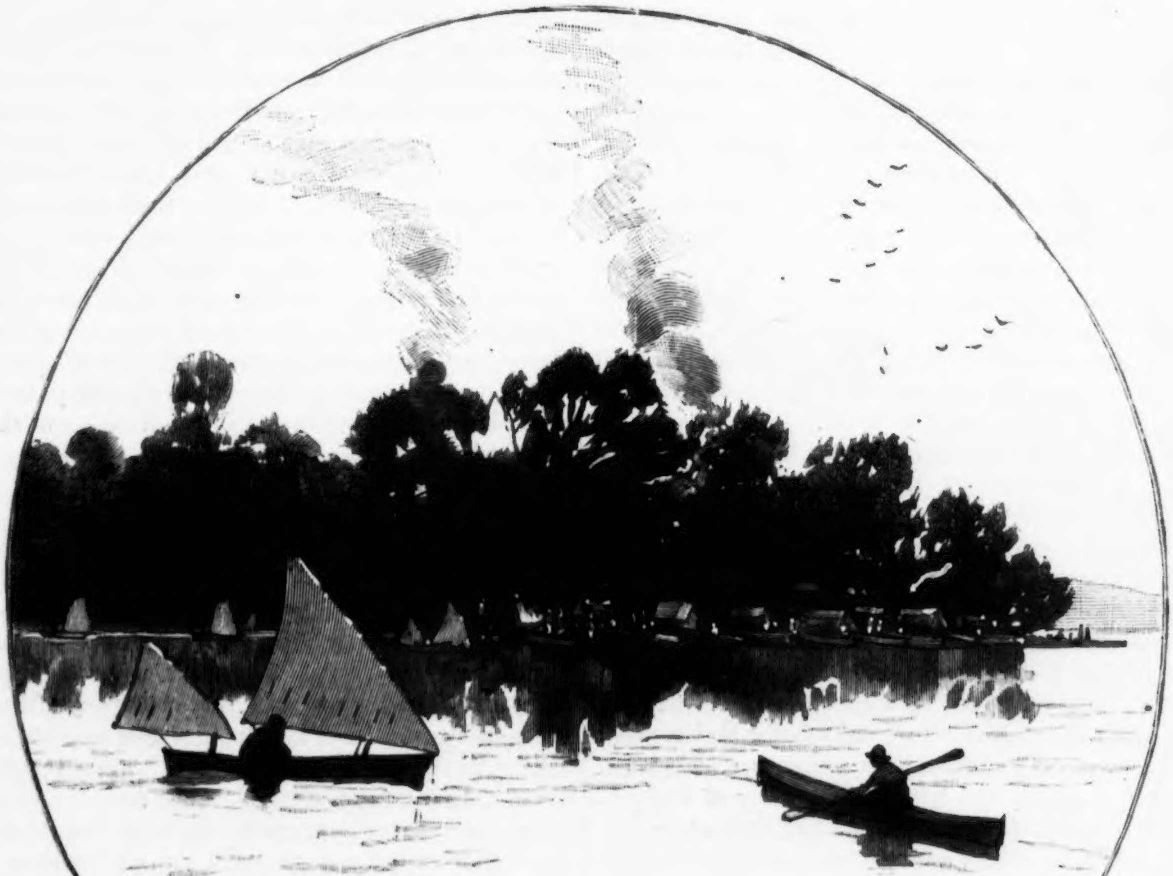
VOL. XXII.—No. 1. JULY, 1886. $3.00 PER ANNUM.

CAMPING OUT.

By W. P. STEPHENS.

MODERN civilization may well be described by the words so generally applied to fire: "A good servant, but a bad master." At no previous period have the appliances for easy and comfortable living been so numerous or so generally distributed among all classes, and the men of to-day have much cause for congratulation compared even with those of a generation since. Whether for purposes of business or pleasure, the number of man's servants has of late greatly increased. The telegraph, the telephone, the locomotive and the steamship, the modern printing press, and thousands of minor devices which add immensely to the sum total of his pleasures, are all willing servants if properly used; but once in control, they become the hardest taskmasters.

The telegraph and telephone offer a ready and useful service at all times; but, again, they often become the most rigid fetters, binding a man's whole life to the office and exchange. Steam has increased to an enormous



THE CAMP.

XUM

extent the ease and pleasure of traveling, but it is now too often used as a means for a rapid rush from place to place, with none of the pleasures which accompany more deliberate travel; and the many other adjuncts are too generally misapplied as a means for accumulating a little more money or building up a short-lived fame at the expense of health and true enjoyment. Men have come to live fast, rather than well.

The wise man is he who, while appreciating and utilizing all these privileges to the fullest extent, has independence of mind sufficient to dispense with them at times, and to refresh himself and renew his life and vigor by a short return to mother earth, and a more primitive form of existence. The average American, with his characteristic energy, is apt to devote himself early in life to some special object, which he probably will attain eventually, but for years he has time neither for rest nor pleasure. When he is in the position to enjoy a well-earned respite, all capacity for doing so has been lost, and he must remain a money-getting machine or die speedily of *ennui*. The great importance of recreation, and especially of outdoor sports, was long lost sight of in the busy days of our earlier history, when a vigorous outdoor life was followed by most men from necessity, but there came a time, later on, when mercantile pursuits began to overbalance the agricultural, and it seemed as though the health of the nation must suffer from a too close devotion to work. Fortunately a reaction has now set in. Men, and women too, realize the importance of more fresh air and outdoor exercise, and sports of all kinds were never in a more promising condition in America than they are to-day. Each, from yachting to lawn-tennis, has its patrons and its proper place as an agent of health and a means to a higher physical life; but none is so inexpensive, so easily within the reach of all, or, if properly followed, so pleasant and beneficial, as a few weeks spent under canvas in the open air, or, as it is generally called, camping out. In Canada it has long been very popular, and it is customary for families, large and small, to find a home in the woods during a part of the Summer, generally on the banks of some small stream, with water enough to float the indispensable open canoe, either birch or basswood.

One naturally associates camp life with the army, and, besides the regular army of the United States, a small part of which is really under canvas in sober earnest, a great division of the outers each year is made up of the militia regiments of the various States, which spend a few weeks in camp each year.

This sort of camp-life, and that of some of the "camp-meetings" of the religious denominations, has little to attract the average camper-out who desires comparative solitude. What is needed is a period of rest and repose, free from all cares of business, with pleasant and healthful exercises and sport, and without too many of the inevitable deprivations and discomforts. Unfortunately, the latter are apt to play a very prominent part in the experiences of the beginner, and it frequently happens that the first week in camp is also the last, and the disgusted neophyte returns home with the resolve never to wander again beyond the realms of clean sheets and a cooking-stove.

The main object of the old camper is simplicity; he tries to carry as little as possible with him, and to depend on his skill and experience for his subsistence in the woods. The novice, on the other hand, starts off with little experience, but a load of impedimenta that would puzzle an old hand to pack compactly and transport easily. A camping party of "tenderfeet," as they are impolitely termed, is always a never-failing source of amusement to the old woodsman.

Supposing such a party of four or five to have located a camp, and to have, by some means, brought to the place the various articles which they consider essential, their experience is apt to be in this wise: A tent of some kind is sure to be a part of the outfit, and first a site is selected, and it is pitched after a fashion. The ground is probably rough and uneven, but in the hurry this is apt to pass unnoticed. There may be higher ground in the rear, whence any surface water will run, but the day is clear and bright, the sun is shining, and such a thing as rain is never even thought of. The tent pitched, a rubber blanket is thrown down for each man, with a greater or less number of woolen blankets, making the bed. Pillows are not thought of at the time, but they will be remembered later on. Besides this, there is a most varied collection of *bric-à-brac*, prominent among which are sure to be several coffee-pots—all new and shining—of novel and complicated shapes, axes of ingenious form, designed for anything but cutting wood, outfits for shooting and fishing that as yet have never seen service, with an army of Yankee notions, suggesting strongly a wholesale purchase at some of the big city stores which deal in everything, from a yard of lace to a washing-machine.

The party are tolerably certain to have something on hand for the first afternoon in camp, a stream to fish or some point of interest to visit, and this takes up the time until five or six o'clock, when all come together with real open-air appetites, and dinner is proposed. Of course, a fire is the first thing, and all want to build it, but the matter is finally intrusted to one or two experts who have seen campfires on the stage, or perhaps have inspected a gypsy camp at a church fair. Of course, wood will burn; so wood is gathered, but it is either wet or green, to a certainty. A collection of limbs and branches, reduced to manageable size by much exertion with a toy ax, is finally piled up in pyramidal shape, and after many efforts is ignited. It does not burn much at first, but there is plenty of smoke, which rushes into the tent, and drives out, in confusion, the cook who is carefully studying the polyglot directions on a can of patent soup; it flies about the camp and brings confusion to the assistant cook, who has just cut his hand with a most ingenious and novel can-opener, and it routs completely the pair who are laboriously erecting a structure of forked sticks such as is only seen in the front yards of country villas, in company with a red kettle.

After a season of smoke comes the flame; small at first, and lapping prettily around the sticks, but soon increasing in volume until a roaring volcano belches forth sparks and embers over tent and clothing, throwing out such an intense heat that no one can approach it. Now, surely, is the time for cooking. Various parcels of mysterious shapes are opened, and reveal several frying-pans (every man is sure to have at least one), a large collection of coffee-pots, with patent broilers, reversible gridirons, and other similar utensils. Most of these articles are at once filled from the cans and boxes that contain the provisions, and then thrust as far as possible into the flames. Now begins the fun, but not for the hungry watchers. An ominous sizzling and spluttering betrays the fact that the fish in the frying-pan are being reduced to cinders in places without any appearance of cooking in other parts. Scarcely are they off the fire, at the expense of burned fingers, before the largest and most complicated of the coffee-pots is seen to subside suddenly into a shapeless mass of metal, while a terrific explosion in another quarter announces that the water has boiled away in the saucepan that contains a can of pudding. Oatmeal is an excellent thing to have in camp—it is so handy, so easily cooked, and so nutritious—but the hungry novice is sure to measure the dry meal by his appetite, and to provide a liberal portion, forgetting how it swells when wet. A quart kettle is filled half-way with the prepared meal and then to the top with water, and it is put in a nice warm place, where there is plenty of flame. Did you ever see the curious toy called eggs of Pharaoh's serpents ?—a small pyramid that, when ignited, turns into a heap of ashes fifty times its original size ? The oatmeal soon starts to perform a similar feat, and with the most successful results. Waiting until no one is looking, it quickly boils over the kettle, rises higher and higher in a mountain of dry, swelled grains until it threatens to overwhelm not only the fire but the entire camp, and then, like a punctured balloon, collapses into an insignificant heap of ashes about the ruins of the kettle.

Who that has read of camp-life has not longed for the delicious flapjack, light and delicate ? and who has not heard of the camp cooks whose dexterity is such that two of them will toss cakes from one to the other ? And then flapjacks are so easy to make ; only a little prepared flour mixed with water and cooked in a pan. Nothing seems easier, but it isn't until you know how; and the demoniacal manner in which that batter will stick to the pan, curl up, run into corners, burn, and do anything but cook, will astonish one who tries it for the first time.

By the time the cooking has reached this stage, all are very hot, tired and hungry, and well smothered with smoke ; but their troubles have only begun. When the meal is finally ready, it is a mixture of partly burnt, partly raw food, mingled with ashes, bits of stick, etc., that would scarcely tempt the appetite of an ostrich, and that even our tired campers are glad to turn away from in spite of their hunger. One solace only remains, the young woodsman's and canoeist's friend—canned corned beef. Careful chemical analysis has established the fact that *there is* some nourishment in canned corned beef, but, as has been well said by one who has tried, the same is true to a certain extent, of sawdust, while in taste there is little to choose. However, in this case there is no alternative, the red pyramid we know so well is divested of its metal overcoat, bread or hard tack is produced, with spring water, and at last a brief and unsatisfactory meal is made.

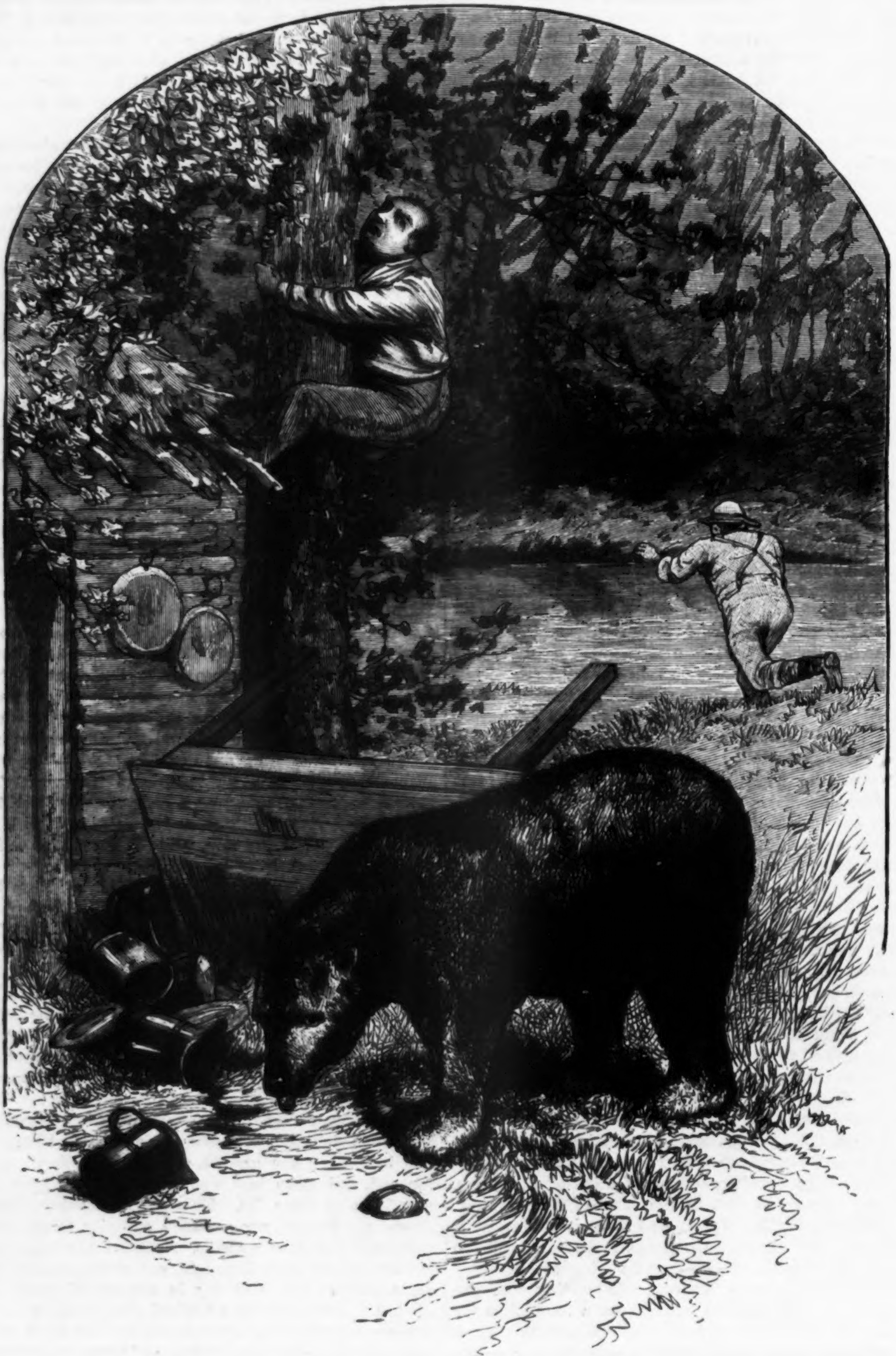
There still remains the dish-washing, the bane of all who camp out, but our tired men are little in the humor for any further labor in this direction, and are only too glad to think of bed. Blankets are spread out, pillows are improvised from anything at hand, and all turn in, but not to sleep. After a day of labor and excitement, the reclining position and utter idleness are for a time very restful, but just when one should drop quietly off into a doze, there is a sensation of uneasiness about some of the larger bones, which increases until an investigation is in order, revealing an edge of a buried stone, or a root of a tree, overlooked in the haste of the morning. All efforts fail to dislodge it, and there is not room to move away, and the sufferer groans and tosses until the obstruction, whatever it is, seems as big as his head. Meanwhile, the boots or canned goods or other stuff that has been hurriedly pressed into duty as a foundation for a pillow, becomes endowed with a wondrous number of corners and angles, none of which conform to a single point of the head. At such times, too, musquitoes, bugs, gnats, flies and creeping things are usually rife, while, should it happen to rain, the water drips through the light tent, runs in torrents down the hillside and beneath the sleeper, and it sometimes happens that the Summer storm is violent enough to precipitate the badly stayed tent into the general ruin. After such a night as only Poe could tell of or Doré picture, it is small wonder if the embryo woodsmen arise tired, wet, hungry and utterly fagged out, only anxious to get home and stay there.

The picture is not an inviting one, but, alas ! many will recognize its truthfulness, and it might be much worse. If, for instance, the party had carried one of the patent camp-stoves and outfits sold to unwary ones, instead of trying a wood fire, they might, in addition to being smoked nearly to death, have sought complete escape in self-destruction ; or had they tried any of the modern successors of the rack or Inquisition, the folding camp-bed, their reason might have been permanently wrecked. The antics these couches have been known to perform, shooting out first one leg and then another, and doubling up like a jackknife, would cause envy in a buck-jumping horse. A victim of their manœuvres, a strong, hearty man, has been known to struggle with one until completely exhausted, finally dropping helpless among a wreck of canvas, wood and iron, with an exclamation that sounded like Amen, but was something stronger.

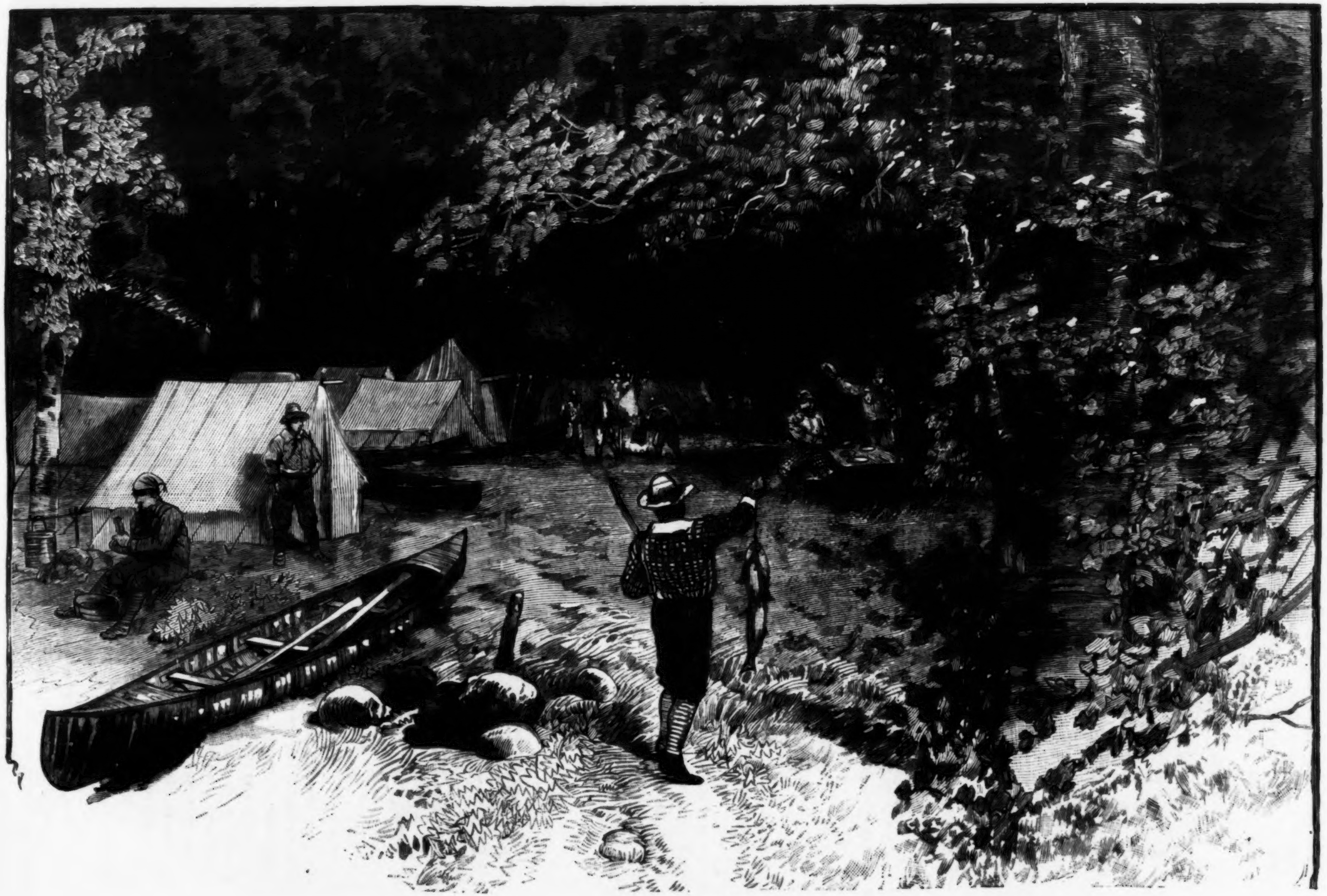
Such is a day and night in camp to a party of beginners, and it may well deter any one ; but all camping out is not like this. There is a camp to which, on any day in August or September, we could guide the reader, a camp more or less like many others throughout the country, where a little skill and experience make the glorious outdoor life all that it should be, and reduce the discomforts and annoyances below the average of the dweller in brick and brownstone. A sandy beach a couple of yards wide divides the smooth turf from the clear, bright waters of a noble river. On the beach are drawn up two or three open canoes, each with rugs and cushions, and its pair of light maple paddles. A short distance away, on the shore, are pitched a couple of wall tents well secured with guy-ropes, and covered each with a fly sheet to keep out the rain, while in front of each is an awning hung. A little trench about the two serves to divert any surface water, and inside the ground has been carefully smoothed off before the beds of well-picked hemlock browse were laid. The pillows, too, are of the same fragrant material, stuffed into light muslin bags or covers, easily washed and renewed. Both tents are plainly furnished inside, with only such articles as long use has shown to be necessary, but one in its fittings betrays plainly that there are ladies in camp ; a fact still further evident in the little grove where a hammock is swung ; books and needlework are strewn about on rugs and blankets, and a merry party are chatting together.

The culinary department consists, first, of two large logs, some eight inches in diameter and six feet long, laid side by side on the ground, about four inches apart at one end, and seven inches at the other ; the upper sides of each being hewn flat. This curious-looking affair is the camper's range, *par excellence,* superior to all patent stoves and portable apparatus. A fire is made between the two logs, where a good draught can always be had, and the wood, cut and kept dry in advance if possible, is allowed to burn down to a hot bed of embers. Over the narrowest part of the space stands the coffee-pot, at the other end the great potato-kettle, and between are various other pans and utensils, with a generous space of hot coal left to broil a steak or mess of fish over, or for a plate of toast. No handles melted off here, no stifling smoke and

XUM



THE CAMP INVADED.



A CAMP IN SUMMER DAYS

XUM

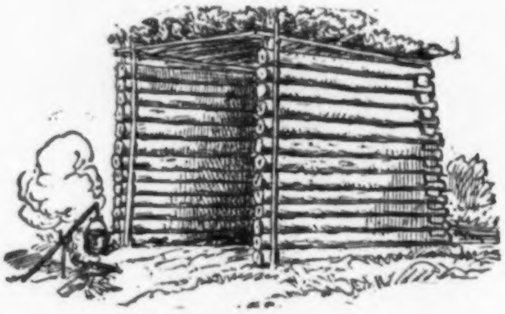
hot flames, no grimy pots and pans. On the warm tops of the logs lie the cups and plates, and part of an appetizing meal already dished.

The presiding genius of this department, a tall, handsome French-Canadian, a gayly striped toque surmounting his bronzed face, is near by with a spade, digging in the sand—for what? A few turns of the spade disclose an iron lid about two feet in diameter, and a little more sand thrown out reveals a deep pan of cast-iron under the lid. Lifting this out with an iron hook and carefully dusting it off, the top is removed, disclosing a nest of seven rich, brown loaves of bread such as one never sees in cities; bread that would indignantly disown any relationship to the stuff sold under the same name everywhere out of the woods. This camp-oven is used not only for bread, but for beans—a favorite luxury in the lumberman's camps—for meat, and any cooking. A hole is dug in the earth or sand, a fire is kindled, and allowed to burn until only the ashes are left and the ground is thoroughly heated. The hole is swept clean of all embers and the bake-kettle placed in it and covered with hot earth, being left for an hour or more until the food is thoroughly cooked.

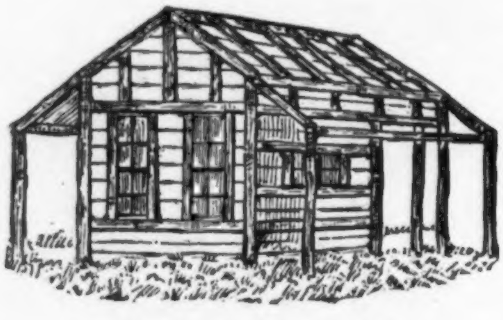
Before the meal is ready a canoe is seen up the river, coming swiftly down under the impulse of two flashing paddles, one wielded by a lady. The blue sky, reflected in the sparkling water, makes a pretty background for the golden yellow of the canoe, while the red toque of the lady, with her companion's darker head-gear of blue, add just the needed tone to the picture. The canoe strikes the sand, the bowman leaps out and hauls her up, the lady steps lightly out, and the rods, with a fine string of fish, are carried ashore, and soon a jolly party are seated on a rough plank bench beside a table of similar build.

Such is camp-life under proper management, as it is enjoyed in thousands of camps in the United States and Canada every Summer, and as it might be enjoyed by hundreds who spend far greater sums in a few weeks at a watering-place without a tithe of the benefit to health. This is the camp of the Summer-outer who spends a few weeks in the woods, but who is still tied closely to civilization, returning to it after a short absence. Now let us visit the camp of the woodsman, whose life is spent among the birds and beasts of the forest, and whose chosen companion is Nature herself. In these days of steam there are comparatively few places left, east of the Mississippi, which offer a quiet retreat to men of this stamp; but the traveler in the remoter parts of Florida, or among the small, secluded lakes of the Adirondacks, may chance on the camp of a true woodsman, one whose home has been in the woods for more years than many of us can number. The plain camp and simple outfit proclaim the old hunter content with little, and finding full enjoyment in this placid, uneventful existence. His shelter is a little "shanty tent," a structure of four posts driven into the ground and joined with four strips at the top, over which is stretched a covering of water-proofed sheeting. In front is the camp-fire, constructed as described, or else a sort of fireplace of green logs. Near by is a pile of dry wood, in the tent is the trusty gun, a fly-rod, a knapsack, a small, light camp-ax, a sleeping-bag, and a few articles of clothing. The cooking utensils are but few: a coffee-pot and frying-pan, with one or two others; the skill of the hunter and cook does the rest. On the beach, for this camp is sure to be very near the water, is the hunter's special pet, a canoe, so delicate and small, weighing less than a dozen pounds, that most men would hesitate to use it; but it is safe and roomy enough for its owner. With such a simple outfit as this he passes his days alone, save for his treasured black-brier pipe, asking nothing of the world as it rushes on, but extracting an intense, if quiet, enjoyment from his life of solitude.

Far different from this is the camp sometimes found quite near to a large city. For some years a gentleman of New York has been in the habit of crossing the Hudson each Summer, to a point on the Palisades just opposite the city, where a camp of two tents made a Summer home for his wife and daughter and himself. The tents were permanently pitched and neatly furnished, and the family lived there at a merely nominal expense, enjoying all the pleasures of a country life, while within easy reach of the city at any time. Another similar retreat was situated on an island less than a mile from a large northern city, a canvas house of good size, the floor being regularly laid of boards, and the tent itself, of red and white canvas, sewn by the ladies of the party. The space was divided into a central hall, with a large room on one side and two smaller ones on the other, while a small tent in the rear formed an annex used as a kitchen. The interior was carpeted and well furnished. Just outside the rear door a sailing-canoe and some other boats were moored, used for visiting the city. In this canvas house a large family spent the entire Summer cheaply and pleasantly, and with far more satisfactory results than if they had staid in a city house or had been for the same time in a big Summer hotel. Many similar camps are found each Summer, the more pretentious taking the form of small frame cottages, some of which, the so-called "portable houses," are so constructed as to be readily sent by rail and quickly erected. Others are of more rustic design, built in the woods of logs, with bark roofs, or, perhaps, a framework of cedar poles and saplings, covered and walled with canvas.



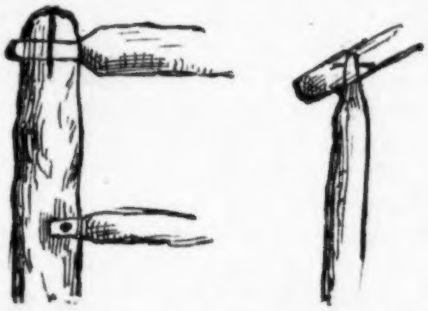
CANADIAN CABANE.

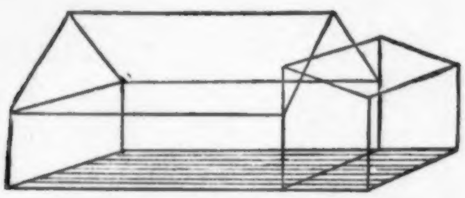


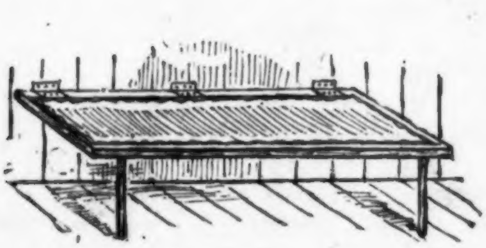
FRAME OF BIRCH-BARK LODGE.

The permanent camps are fitted up rather more elaborately than those in tents. A stove of simple construction is fitted for cooking, chairs and tables of rustic design are improvised, beds are made of a rough framework covered with tightly stretched canvas, or hammocks are swung, and the walls are soon ornamented with trophies from the woods.

Such are the homes of the camper—pleasant, healthful homes, where the Summer and Fall are quickly passed in hearty outdoor sports and vigorous amusements that carry a man back to his boyhood days. No morning paper breaks in with an unwelcome interruption. No stock "ticker" tells of rising or falling markets, and for a time the annoyances of business and the exactions of society may be neglected with impunity. Many think that such a life is only suited to the strong and vigorous, but this is a great mistake. The ones who need and who will obtain the greatest benefit from it are the invalids and persons of delicate health, whose life is spent wholly indoors. Of course it would be folly for them to attempt to "rough it," as the practiced woodsman or the old camper-out of many Summers does. Care must be taken to select a suitable locality—mountain or seashore, as may seem desirable—and to arrange a dry and secure shelter in a good site. Here a pleasant Summer home may be made, where the work of restoration and the gaining of new strength will go on in a way that will put to shame the vaunted resorts of the springs and watering-places, where a seven-by-nine room and late hours are supposed to give rest and health.


TIMBER FASTENINGS OF BIRCH-BARK LODGE.


FRAME FOR FLOORED WALL-TENT.


THE WALL COT.

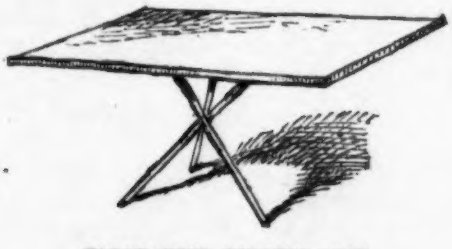
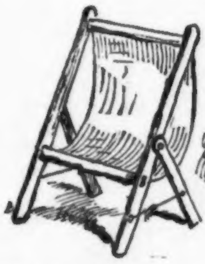
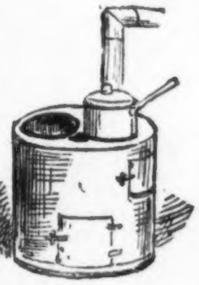


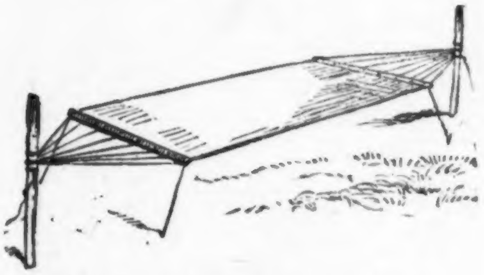
TABLE WITH FOLDING-LEGS.

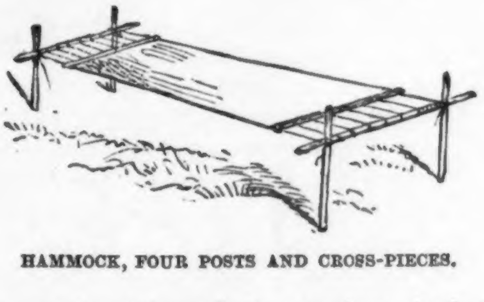
But camp-life, even among pleasure-seekers, is not confined to Summer. There is a large body of hardy veterans who find pleasure even in the weather of a Canadian Winter, and who, in search of the moose and caribou, think nothing of leaving warm beds and firesides for a week under canvas in the snow. No Summer outfit answers here; the heaviest clothing and warmest headgear are needed. At night the camper stows himself away in a sleeping-bag—a large bag made out of a thick quilt, in which he can bury himself completely—and sleep comfortably in the coldest weather. With such a bag, a light affair of eider-down, weighing only a few pounds, and its accompanying covering of oiled muslin, protecting from rain and snow, a trip in a canoe has been made along the Labrador coast late in the season, the canoeist sleeping out comfortably, notwithstanding the bitter cold.

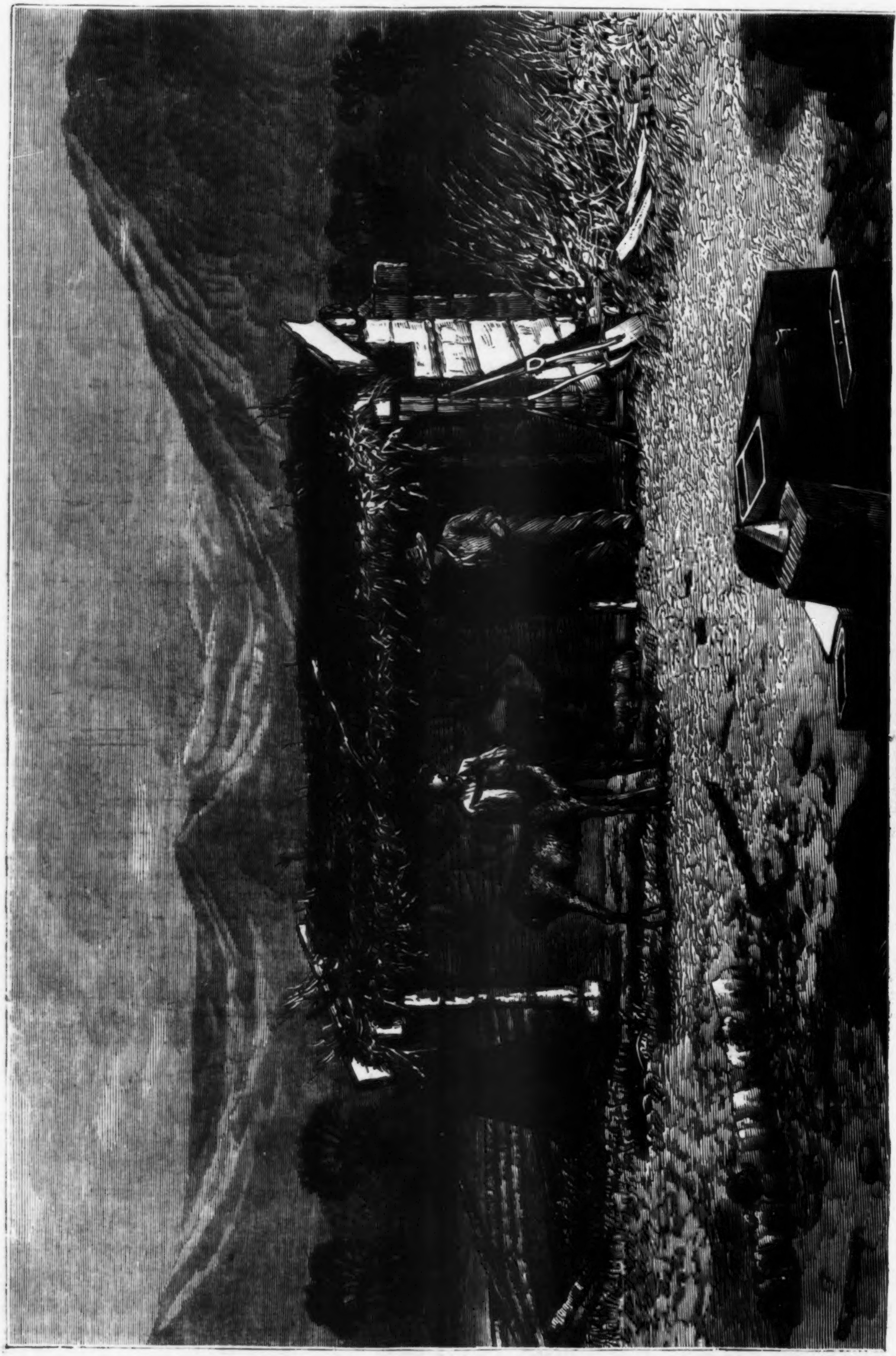

EASY-CHAIR.


CANOE CAMP-STOVE.

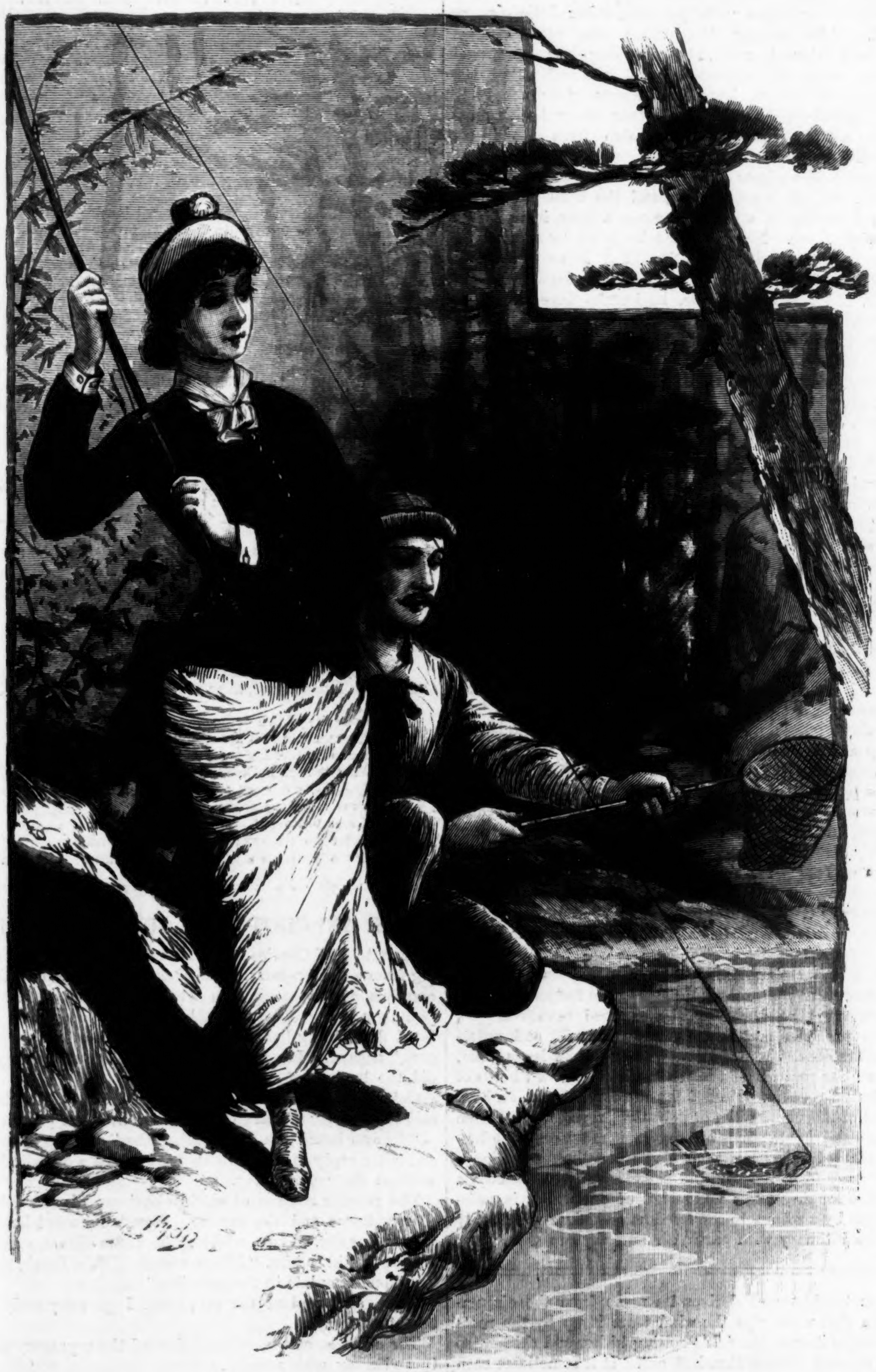
Of the many organizations which make a Summer camp a part of their programme each year, none is more successful than the body of canoeists, now nearly one thousand strong, known as the American Canoe Association. To cruise and camp is the main object of the canoeist, for this his boat is built and fitted, and for this are all its appliances designed. On every Saturday night when the waters are not closed by ice, canoes in all parts of the country, from Florida to Canada, are packed and launched, and alone, or in parties of two or three, their owners set out for a day's camping. At dark a halt is made, the canoe is hauled up in some cozy nook, the little striped tent is pitched over it—hanging from the masts—a fire of wood is soon going, or, if rainy, a little alcohol lamp is lit inside. Over one or the other an omelette is cooked, a cup of coffee or chocolate is made, a can of soup is heated, and supper is spread on the


HAMMOCK, SWUNG WITH TWO STICKS.


HAMMOCK, FOUR POSTS AND CROSS-PIECES.



CAMPING IN SIGHT OF THE ROCKIES.



THE POETRY OF "CAMPING OUT."

hatches. Bread and marmalade appear from some mysterious inner recess with, perhaps, other delicacies, or fruit. After supper the dishes are soon cleaned up and stowed away, the sleeping-bag is spread in the canoe, the clothes-bag makes a soft pillow, the little globe lantern, hung from above, gives a light to read by, while the sides of the tent, covered with musquito netting, prevent all intrusion from the insect world.

After half an hour over pipe and book, the light is turned out, all is made snug, and the tired canoeist is soon dreaming of a Summer camp a year, instead of a fortnight, long. Next morning he is up by sunrise, for time is very precious; his breakfast is ready; all is cleaned and packed away, and the canoe launched. Off again, under sail or paddle, he hurries here, or loiters there at will, stopping, perhaps, for dinner, and then off again, until he turns toward home in time to return to the white collar and black coat of civilization in the evening, or, at latest, to be at his desk in the office next morning.

Such holidays are enjoyed every week by many, and serve as a preparation for the grand event of the year, the A. C. A. Meet. To some central point chosen for its natural beauty, Lake George or the Thousand Islands, come hundreds of pilgrims from all quarters, not strangers to each other, but nearly all bound by one common tie, whose greatest pleasure it is to meet together for a couple of weeks each year in the hearty companionship that a life in camp engenders. Tents of all patterns are pitched by the score on the hillside and in the grove. Flags and pennants fly from high trees; at night huge camp-fires and rows of Chinese lanterns light the scene, while the inhabitants of this curious and ephemeral city vie with each other in the variety and brightness of their picturesque apparel. The time is filled with races, fishing, short trips about the vicinity, in visits to the ladies' camp a mile away; and, best of all, in the still hours of the Summer night, when the fire burns up from an enormous pyramid of wood on the highest hilltop, in songs and stories of other camps, of long cruises, of adventures on the Mississippi, on Lake Gorge, in the Everglades of Florida, in the wilds of Northwestern Canada and on the rivers of India—for the canoeist of to-day cruises everywhere—and wandering in distant lands, every experience is carefully treasured until the time when he returns, as all do, to this shrine of the craft, to be related to listening friends.

Such is the camp-life of those who seek only pleasure and recreation; but others there are, less fortunate, whose homes must be made on the exposed mountain-side, where precious metals are found; in wild and untraversed regions, where their zeal as explorers leads them, and on the prairies of the West, where the vast herds of cattle find pasture. No holiday life is theirs, but a hard round of labor and often of privation, separated, far from friends and home; but, strange as it may seem, the life, like that of the sailor, has its own peculiar fascination—once away from it and amid the pleasures of the city, a restless longing takes possession of one which is satisfied but by a return to the freedom and vigor which only a close intimacy with earth, air and sky can give.

THE tumble-weed derives its name from the circumstance that when ripe the wind tears it up by the roots and sends it over the fields rolling hither and thither, so that its seed is soon thrashed out. It is sometimes seen piled fence-high on the prairie farms.

BURNS AND HIS HIGHLAND MARY.

By G. WASHINGTON MOON.

THE mountain lake, which seems asleep in love,
And, dreaming, murmurs to the pebbly shore
Its tender passion for the clouds above,
Which stoop to kiss it, and at sunrise soar
Away to heaven, hears oft the tempest roar,
And rouses till its bound'ries are o'erleapt;
But soon is calm and loving as before—
So, too, the poet's soul by passion's breath was swept;
But calmed itself again, as if in love it slept.

He breathed out war, and whispered love's soft vows;
He poured forth satires, and wrote hymns of praise;
He wailed the dirge, and sang the mad carouse;
And told of "palaces," and "banks and braes."
But "Auld lang syne," and such-like touching lays,
Reveal the nature whence they all did flow—
Who has not heard his song of other days,
So quaintly sweet, "John Anderson, my jo"?
Nor felt, "How true the heart that could have written so!"

Ay! true indeed; and loving as 'twas true.
How bright a picture of his heart we see
In that brief hour wherein he bids adieu
To her whose lover he was proud to be—
Dear "Highland Mary" of fond memory!
Ere many months they hoped to be united,
And dwell together 'neath their own roof-tree.
They met, to part awhile; and vows were plighted—
They never met again! Chill death that sweet flow'r blighted.

The twining branches o'er their heads were waving;
They stood beside a purling silv'ry brook,
And, in its waters clear, their clasped hands laving,
They held between them God's all-sacred book;
And, vowing to be faithful, fondly took
A last embrace! Ever as she did gain
Each distant height, she turned with ling'ring look;
He, after her his tearful eyes did strain;
And so the lovers parted, ne'er to meet again!

The mem'ry of this scene would ever fill
His heart with all the agony of woe.
Honor to Burns! his name is cherished still.
What though he lived a century ago;
Time, in its onward and resistless flow,
Only the more the poet's name endears!
Honor to Burns!—'tis all we can bestow—
Sighs for his sorrows; for his loss, our tears;
Praise for his deathless songs; and, for his memory, cheers.

SOME ANECDOTES OF CHARLES LAMB.

IT is told of Charles Lamb that one afternoon, returning from a dinner-party, having taken a seat in a crowded omnibus, a stout gentleman subsequently looked in and politely asked, "All full inside?"

"I don't know how it may be with the other passengers," answered Lamb, "but that last piece of oyster-pie did the business for me."

Coleridge, during one of his interminable table-talks, said to Lamb, "Charlie, did you ever hear me preach?"

"I never heard you do anything else," was the prompt and witty reply of Elia, which has become a favorite byword at the present day.

The regular routine of clerkly business ill suited the literary tastes and the wayward though innocent habits of our essayist. Once, while at the India House, one in authority said to him, "I have remarked, Mr. Lamb, that you come very late in the morning."

"Yes, sir," replied the wit; "but I go away early in the afternoon."

The oddness of the excuse silenced the reprover, who turned away with a smile.

A retired cheesemonger, who hated any allusion to the business that had enriched him, once remarked to Charles Lamb, in the course of a discussion on the poor-law, "You must bear in mind, sir, that I have got rid of all that stuff which you poets call the 'milk of human kindness.'"

Lamb looked at him steadily, and gave his acquiescence in these words: "Yes, sir, I am aware of it; you turned it all into cheese several years ago!"

Lamb was once invited by an old friend to meet an author who had just published a volume of poems. When he arrived, being somewhat early, he was asked by his host to look over the volume of the expected visitor. A few minutes convinced Elia that it possessed very little merit, being a feeble echo of different authors.

This opinion of the poetaster was fully confirmed by the appearance of the gentleman himself, whose self-conceit and confidence in his own book were so manifest as to awaken in Lamb that spirit of mischievous waggery so characteristic of the humorist. Lamb's rapid and tenacious memory enabled him to quote fluently several passages from the pretender's volume. These he gave with this introduction: "This reminds me of some verses I wrote when I was very young." He then, to the astonment of the gentleman in question, quoted something from the volume.

Lamb tried this a second time; the gentleman looked still more surprised, and seemed evidently bursting with suppressed indignation. At last, as a climax to the fun, Lamb coolly quoted the well-known opening lines of "Paradise Lost" as written by himself.

This was too much for the versemonger. He immediately rose to his feet, and, with an impressive solemnity of manner, thus addressed the claimant to so many poetical honors:

"Sir, I have tamely submitted all this evening to hear you claim the merit that may belong to any little poems of my own; this I have born in silence; but, sir, I never will sit quietly by and see the immortal Milton robbed of 'Paradise Lost.'"

"Coleridge," says De Quincey, "told me of a ludicrous embarrassment which Lamb's stammering caused him at Hastings. Lamb had been medically advised to take a course of sea-bathing, and accordingly, at the door of his bathing-machine, whilst he stood shivering with cold, one attendant at each shoulder, like heraldic supporters, they waited for the word of command from their principal, who began the following oration to them:

"'Hear me, men. Take notice of this: I am to be dipped——'

"What more he would have said is unknown to land or sea bathing machines; for, having reached the word dipped, he began such a rolling fire of di-di-di-di that, when at length he descended *aplomb* upon the full word dipped, the two men, rather tired of the long suspense, became satisfied that they had reached what lawyers call 'the operative clause' of the sentence, and both exclaiming at once, 'Oh, yes, sir, we're quite aware of that,' down they plunged him into the sea.

"On emerging, Lamb sobbed so much from the cold that he found no voice suitable to his indignation; and again addressing the men, who stood respectfully listening, he began thus:

"'Men, is it possible to obtain your attention?'

"'Oh, surely, sir, by all means.'

"'Then listen: once more I tell you I am to be di-di-di'—and then, with a burst of indignation—'dipped, I tell you——'

"'Oh, decidedly, sir,' and down the stammerer went for the second time.

"Petrified with cold and wrath, once more Lamb made a feeble attempt at explanation.

"'Grant me pa-pa-patience; is it mum—um—murder you me-me-mean? Again and a-ga-ga-gain, I tell you, I'm to be dipped!'—now speaking furiously, with the voice of an injured man.

"'Oh, yes, sir,' said the men; 'we know that—we fully understand it'; and, for the third time, down went Lamb into the sea.

"Oh, limbs of Satan!' he said, on coming up for the third time, 'it's now too late. I tell you that I am—no, that I was, to be di-di-di-dipped only once!'"

A NOTED CHURCH.

The old parish church of St. Giles, Cripplegate, one of the most interesting and venerable of its kind in the City of London, has been thoroughly restored, and reopened for divine worship. Its square-built tower, which, with the odd-looking, old-world beacon at its summit, has been so long a familiar landmark in the ward of Cripplegate, has, we are pleased to notice, been left quite intact, and in other respects the body of the church has not been materially altered.

Dating back to the middle of the sixteenth century, St. Giles's Church has always been one held in especial esteem by antiquaries, if only for its association with the memory of John Milton, who was buried in the same grave with his father at the upper end of the chancel. There is a monument to his memory—a bust by the elder Bacon—erected in 1793, at the expense of Samuel Whitbread. Visitors will also scarcely fail to note a monument in memory of John Foxe, the martyrologist, whose gruesome book was in the days of our forefathers considered such acceptable Sunday reading. Perhaps the most interesting fact in connection with the old church is that at its altar, on August 20th, 1620, there was married to Miss Elizabeth Bowchier a young man, scarcely out of his teens, who, when called upon to sign the parish register, had to inscribe it as Oliver Cromwell. We wonder how many visitors to the old church have since gazed upon this priceless autograph of the future Lord Protector of the Commonwealth.

News by Photograph.—During the siege of Paris in 1870 advertisement columns were photographed and carried into the beleaguered city by pigeons. These advertisement columns were full of business notices and family communications to besieged Parisians; and other news of more public importance was sent in the same way. The tiny photographs thus obtained were inclosed in quill tubes and tied to the pigeons' tails. When they arrived in Paris, the photographs were enlarged, copied and distributed. It is said that the total number of messages sent into Paris during the investment was no less than 115,000, that they only weighed two grammes, and that one pigeon could have carried them all!

The following, though old to some, may be new to others, and will enable the latter to make a simple barometer for themselves: Two drachms of camphor, half-drachm of pure saltpetre, half-drachm of muriate of ammonia, and two ounces of proof spirits, in a glass tube or narrow phial, will make a very good weather guide. In dry weather the solution will remain clear. On the approach of change, minute stars will rise up in the liquid, while stormy weather will be indicated by the very disturbed condition of the chemical combination.

XUM

FRANZ LISZT.

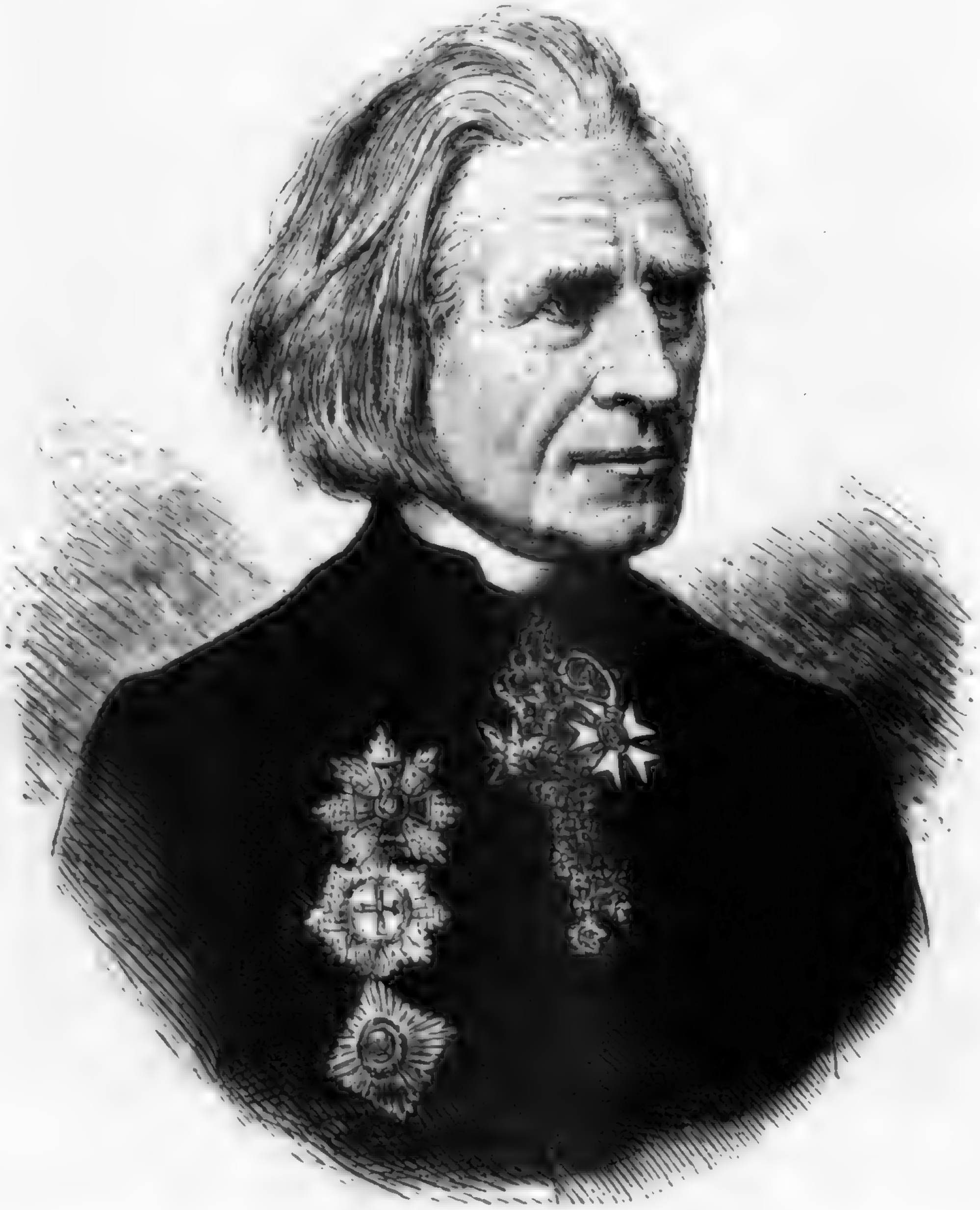
By E. Brewer.

A man like Franz Liszt, who comes before us at the age of seventy-five, clothed with honor and with the purpose of his life achieved, is a character most men delight in. It is, therefore, no idle curiosity which induces us to gather up all that can be told of him by those who have known him intimately; for it is by studying such a life that those who are starting on the race can also hope to win.

To begin at the beginning. Franz Liszt has both Magyar and German blood in his veins. His mother, Anna Lager, was born in Krems, a little distance from Vienna, while his father, Adam Liszt, was the descendant of an ancient and noble Hungarian family. Having no estate, he was compelled to earn an independence, and was fortunate enough to obtain the situation of steward in the palace of Prince Esterhazy, and in the village of Raiding, near Oedenburg, he married and settled in a modest little home.

Adam Liszt had a passionate love for music and art, which his daily occupations left him little time to indulge in. Yet every spare moment was used to such effect that he could play all stringed instruments, as well as the flute and pianoforte; and one or other of these he usually played at the services in the chapel attached to the palace.

Haydn was Kapellmeister to Prince Esterhazy, and Hummel, Concertmeister, at the period of Liszt's stewardship, and between these three men there existed a great friendship. It was here, also, that he made the acquaintance of Cherubini and other famous masters.



PORTRAIT OF FRANZ LISZT.

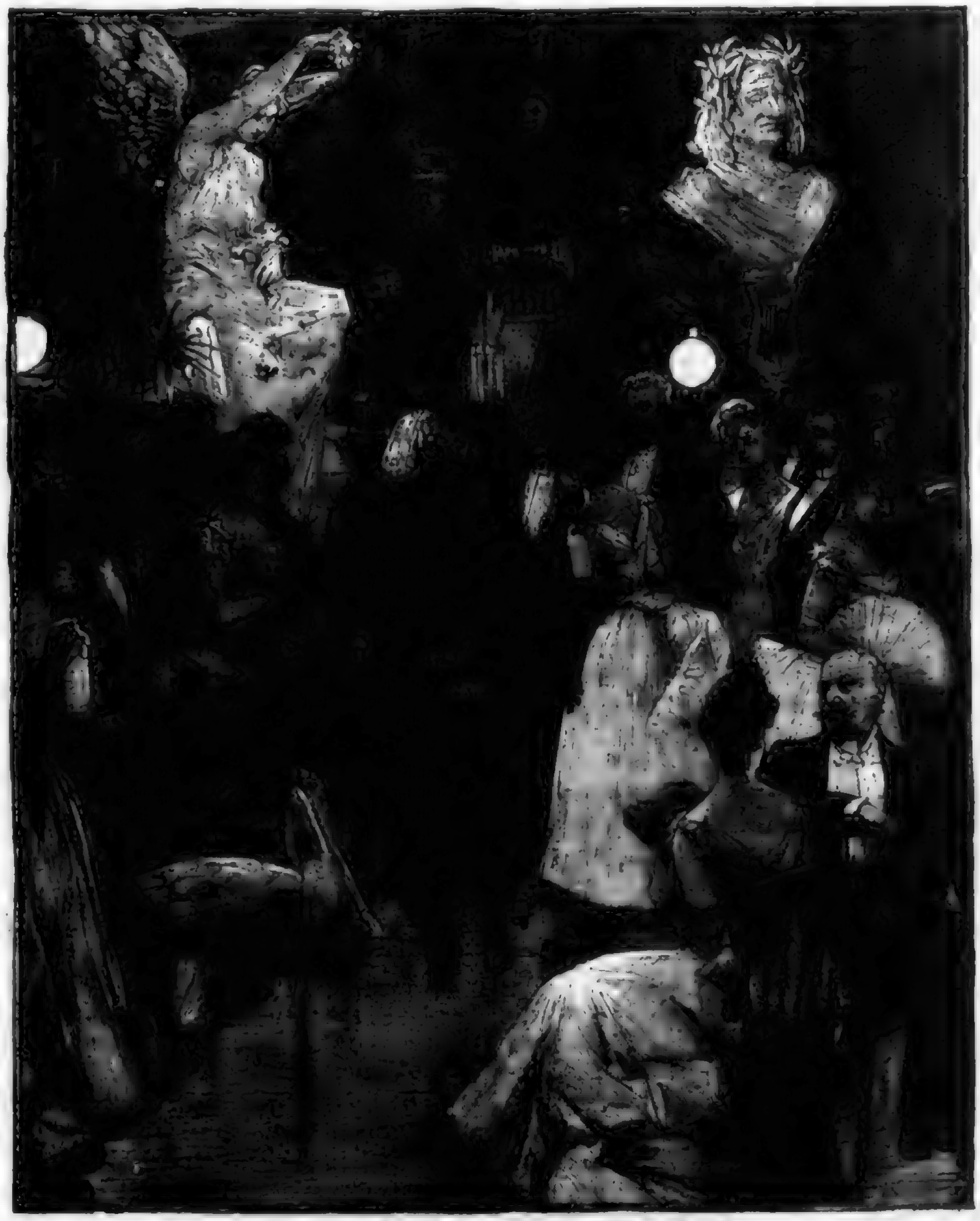
What wonder that Adam Liszt recognized with intense joy the love of music in his little son Franz, who was born in the year of the comet of 1811, in the month of October? The child was brought up in the atmosphere of harmony, and his easily excited imagination was fed and impressed by the home and church music, and by the wild, fantastic melodies of the gypsies, who not infrequently rested in the village. The boy knew his notes before he had mastered the alphabet, and would steal away from his playmates to his father's pianoforte.

From the age of six he seemed to have neither life nor enjoyment out of his music, and applied himself to it with such passionate energy that his mother became alarmed for his health. He was found one day regarding a portrait of Beethoven, which hung on the wall of the living-room, and addressing it said, with all the earnestness of a vow: "*One day I mean to be like you.*"

Speedily and with steady purpose he went forward, astounding every one by his manipulation of the piano, by his reading music at sight and by his power of improvising.

He was only nine years old when he played at a public concert at Oedenburg, with such success that he was at once secured for a concert which was to be given in the prince's palace at Presburg. This concert was attended by a most musical and artistic audience, as well as by many Hungarian nobles, who were so struck and delighted with the boy's talent that they guaranteed him $300 a year for six years, to enable him to continue his studies under the best masters. It would have been difficult to find a happier boy than Franz Liszt when he heard of his good fortune. All he wanted was an opportunity of study; for he never wavered in the purpose of his life; never lost confidence in his power to achieve it, with God's help; and never doubted his power to return in a measure the tenderness, care and self-sacrifice of his parents.

This generosity of the Hungarian nobles brought about an entire change in the life of the Liszts. The boy must seek the best masters wherever they were to be found; and the father, therefore, resigned his appointment as steward, and broke up his little home, to enable him and his wife to accompany Franz.



RECEPTION IN HONOR OF FRANZ LISZT AT PARIS.

So to Vienna they went, and dwelt there two years, while Franz took lessons on the piano from Czerny, and in composition from Salieri and Randhartinger.

Two concerts were given in Vienna for the purpose of introducing the lad of fourteen to the people of his music-loving city. Beethoven, who rarely at this time appeared in public, was among the audience, and was so delighted with the boy's extraordinary talent that he went on to the platform, and, before the crowded assembly, took Franz in his arms and kissed him.

These concerts were a great success, and provided Adam Liszt with the means to take Franz to Paris, and thus fulfill his heart's desire that his boy should enter the Conservatoire and complete his studies under Cherubini.

They came to Paris, but Cherubini would not relax the law of the Conservatoire, which was that no foreigner should be admitted.

"My father and I," writes the boy, "besought very earnestly that the law for once might be set aside, but it was of no avail. I was miserable and not to be comforted; everything seemed lost to me, and I believed there was nowhere any hope for me."

Fortunately he succeeded in securing for his teachers Paer and Reicha, with whom he studied composition, and so was able to make his way without the help of the Conservatoire.

The letters of introduction he carried from the Hungarian nobles opened the *salons* of the Parisian aristocracy to their *protégé*, and the Duchesse de Berry and the Duke of Orleans, afterward Louis Philippe, took him specially under their protection. Le Petit Liszt, as he was called, was the hero of the day, the pet of the nobility, the artists and the learned; in short, of all cultivated Paris.

Just as the press in Vienna, in Munich and in Stutgardt had lauded him, so now did the Paris journals, especially after his appearing at a concert in 1824 at the Italian

Opera. He was said to be the "first pianoforte player in Europe, the child beyond compare, whose bewitching elegance, charm of mind and manner, kind heart and aristocratic bearing had taken captive the hearts of all." Soon Le Petit Litz became known as a composer; and his opera in one act called "La Sancho; Or, the Castle of Love," was brought out at the Académie Royale, in October, 1825, amid such a storm of applause that the actor who played the chief character, when called before the curtain, took up the fourteen-year-old composer in his arms and thus presented him to the enthusiastic audience.*

During the next two years he made artistic tours in Switzerland and in the French provinces; he also came twice to England in 1824 and 1825, accompanied by Erard. George IV. showed him much kindness during these visits.

In May and June, 1827, he played at the Philharmonic concerts in London. His reception was not so enthusiastic as on previous occasions, and his agent suffered a loss, which Liszt, with great generosity, made good.

It was just after this visit that he went to Boulogne, accompanied by his father, to take sea-baths and get a little rest. While there, Adam Liszt died suddenly. Overwhelmed with sorrow as Franz was, he did not forget that upon him now lay the responsibility of providing for his mother, who had staid in Austria while he and his father had been traveling from place to place. So he sent for her at once to Paris, where, at the expense of his ambition, he supported her in comfort by giving pianoforte lessons.

He rarely now appeared in public, and gave himself up to morbid sensitiveness. From this unhealthy state he was suddenly and thoroughly roused by his first love-dream. He fell in love with Caroline, Countess St. Erig, the daughter of the Minister of the Interior. But notwithstanding that the love was mutual, she could not be his wife, as her father had already promised her in marriage.

Again, as in the days of sorrow after his father's death, he withdrew from the world, and would have entered a monastery but for the pleading of his mother, to whom he was ever tender and obedient.

It was the July revolution that roused him and once more set him free to work and mix again in society, when he became acquainted with Berlioz and Chopin, Victor Hugo, Alfred de Musset, and Georges Sand. His ambition, also, was most thoroughly roused by the appearance in Paris of Paganini, whose power over the violin he desired to equal, nay surpass, on the pianoforte.

Franz Liszt, in speaking of Paganini, says that his playing made him understand what the true mission of a musician should be, viz.: not to use his art for egotistical profit and advantage, but, on the contrary, to make it a power of sympathy, uniting and binding the hearts of men together, to use it as a means of inspiring in them the love of the beautiful, the noble and the holy.

In quiet and incessant work the time went by until, in 1834, he made the acquaintance of the Countess d'Agoult, better known by the name of Daniel Stern. This lady, who died in 1876, was the mother of his three children, one of whom is the widow of Richard Wagner. It was in this year, 1834, that he again appeared at concerts, and made good his title to the first rank of pianists.

"It is difficult," says La Mara, "to talk of Liszt's playing to those who have never heard him. His playing is a revelation." "The instrument glows and sparkles under his hands," says Schumann. And Mendelssohn, writing of him, declares: "I have never seen a musician like Liszt, in whom feeling and sentiment seem to run to the fingertips and pour out in an unchecked stream." In Liszt's own words: "My pianoforte is myself, my speech, my life."

After this year of success in Paris, 1834, he lived in retirement at Geneva for two or three years, until he was mastered by the desire of once again living a public life. From 1839 to 1847 he traveled about from place to place, triumph and honor following ever at his heels. He was decked with orders and titles by pope and princes, such enthusiasm as he excited had never been heard of. Suddenly, in the midst of all this, he became weary of triumphs; he seemed impressed with the vanity of it all, and longed for a quiet home; and, to the astonishment of every one, he settled down in the little town of Weimar in 1849, as conductor of the Court Theatre. Here he became the universal attraction, not only of Germany, but of all countries. When Liszt settled in Weimar it was with the purpose of bringing before the public such works as had in themselves great merit, but which had had no opportunity of being produced on any stage. Among these were "Lohengrin," "Tannhäuser," "Manfred," and "Benvenuto Cellini."

Wagner, in his time of sickness, misery and despair, owed much to the kindness and appreciation of Liszt. He himself says: "When in Paris, sick and ill, my eye fell on 'Lohengrin,' I felt a sort of compassion that this music should never appear from off the death-pale paper; so I wrote two words to Liszt, whose answer was that preparations were being made to produce it on the largest scale that the limited means of Weimar would allow." Again he relates how, "while resting in Thuringia for a few days, uncertain whether I must fly from Germany, I saw Liszt conducting a rehearsal of my 'Tannhäuser,' and was astonished at recognizing my second self in the achievement. What I had felt in inventing this music, he felt in performing it. What I wanted to express in writing it down, he expressed in making it sound. Strange to say, through the love of this rarest friend, I gained, at the moment of becoming homeless, a real home for my art, which I had hitherto longed for and sought for always in the wrong place."

Liszt dwelt in Weimar until 1859, when, owing to some opposition to the production of an opera, he resigned his appointment and went on a long visit to his mother, who still lived in Paris. He went to Rome in 1861, and, four years later, received the title of Abbé, became a member of the Franciscan Order, and dwelt for a whole year in the Vatican. Pio Nono had a great admiration for him, calling him his son, his Palestrina.

In 1869 Liszt returned to Germany, and paid long yearly visits to Weimar. The Grand Duke presented him with a house beautifully situated in the midst of the park, and here, says Amy Fay, "he lives elegantly and free of expense, whenever he chooses to come to it. One of the rooms in this house has been furnished and put in order by the Grand Duchess herself. All Weimar adores him. When he walks out he bows to everybody just like a king. No wonder that he is loved and honored, for never has man done so much to help young artists. His heart and purse have been ever open to them, his time and experience always at their disposal. Since 1847 his life has been exclusively consecrated to the benefit of others, to artistic undertakings, and to charitable objects." All who are interested in this great master should read La Mara's "Musikalische Studienköpfe" and Amy

---

* This, the only opera of Liszt, was burnt in the fire which occurred in the Opera Library.

Fay's "Music Study in Germany." Her pictures of Liszt and his everyday life in Weimar are most vivid and fascinating,

Our enthusiasm at his reappearance, after an absence of nearly half a century, has been a marvelous testimony to the power that must have shone out in his early life; the earnestness and quiet strength of his purpose; influences that seem to have followed him even in his retirement. From the Queen, who commanded his attendance at Windsor Castle and hastened to do him honor, down to the humblest of her artistic subjects, there has been the desire to express admiration for a life nobly lived, a purpose perfectly fulfilled. Who that heard him quietly improvising at the rehearsal of St. Elizabeth will ever forget the thrill with which he listened to those first notes struck by the hand that in England had been silent for more than half a lifetime? Or the wave of emotion that swept over him on the following night, as Liszt's appearance was greeted over and over again by storms and tempests of applause? Few people living can compare the Liszt of fifty years ago with the Liszt of to-day as he stood before us; but the face with age can only have gained an added charm; the charm of a heart and mind at rest after its work; the quiet serenity of the evening of a life spent in artistic labors and in doing good to his fellow men.

AMONG the latest things noted is the fact that the Burmese and their neighbors the Shans are very expert blacksmiths, although the apparatus used is of a very crude description. The bellows employed for the forge curiously suggests in its construction a double cylinder steam-engine. The cylinders are represented by two bamboo trunks four inches in diameter, and about five feet long, standing upright on the ground. At their lower ends, a tube runs from each to the charcoal fire in which the iron to be wrought is heated. Piston-rods, also made of bamboo, and packed with bunches of feathers, are fitted within the cylinders. These, when forced downward, cause the compressed air to be urged to the fire through the smaller tubes. A boy perched on a high seat works the bellows by depressing each piston-rod alternately. The Burmese have also a primitive method of turning out brass and bronze castings. The article to be made is, first of all, modeled in clay; it is then covered with a layer of beeswax of the same thickness that it is desired the finished casting to be. An outer skin of clay two inches in thickness is laid above the wax. Funnel-shaped holes at frequent intervals in this outer crust afford a passage for the molten metal; and there are also straw-holes to let out the imprisoned air. As the hot metal melts out the wax, it occupies its place, solidifies, and forms a hollow casting.

AN industrious, if somewhat eccentric, gentleman at Berlin has succeeded, after many years' patient labor, in amassing no fewer than one thousand heels from various kinds of boots and shoes worn by ladies and gentlemen more or less eminent. These novel articles of *virtù* he has had duly mounted in a handsome glass case, while a carefully prepared catalogue gives the date of their acquisition and the names of their former possessors. The origin of this latest development of the acquisitive craze is said to date from a visit by the collector, in 1861, to the old Castle of Kinast, during which a beautiful Swedish lady lost one of her boot heels; and this identical heel forms the most cherished object in the eyes of the ardent collector. He is, it is perhaps needless to say, a bachelor.

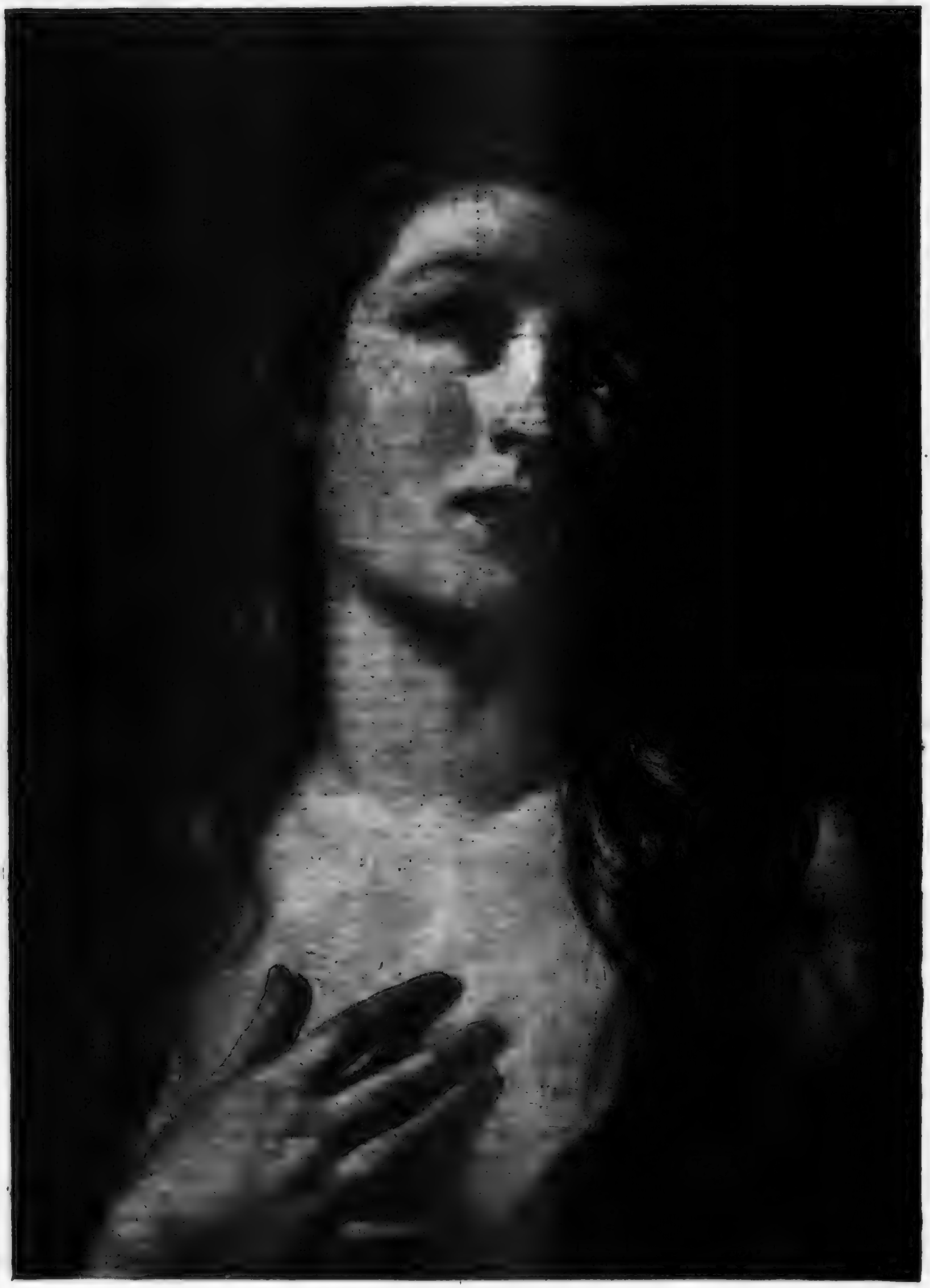
GERMAN UNIVERSITIES AND THE THEATRE.

THE theatre still ranks among the most classical of German temples to the Muses. The spirits of the Dioscuri, whose monument stands at the entrance to the house, seem to hover over the little city still. Servants, exaggerated as the assertion may seem, discuss opera and the choice of classical dramas like people far beyond their station in other cities. I have known mistresses to purchase season tickets for their maids. Yes, where a natural taste is wanting, rare in one of Teutonic birth, it must be cultivated. Seats are so reasonable that one does not wonder the entire town and cities for miles around possess season tickets. One can sit in the best place in the house from September till June for less than $30. The entire community congregate on the "day of sale," and individuals triumph in carrying off the choicest places. Some have occupied the same identical seats for twenty-five years. Could they be other than educated? For an American who wishes to study music no other city offers so many advantages as Weimar, the home of Liszt, the patron of its opera and orchestral school. The town has many traditions and customs which centuries have hallowed.

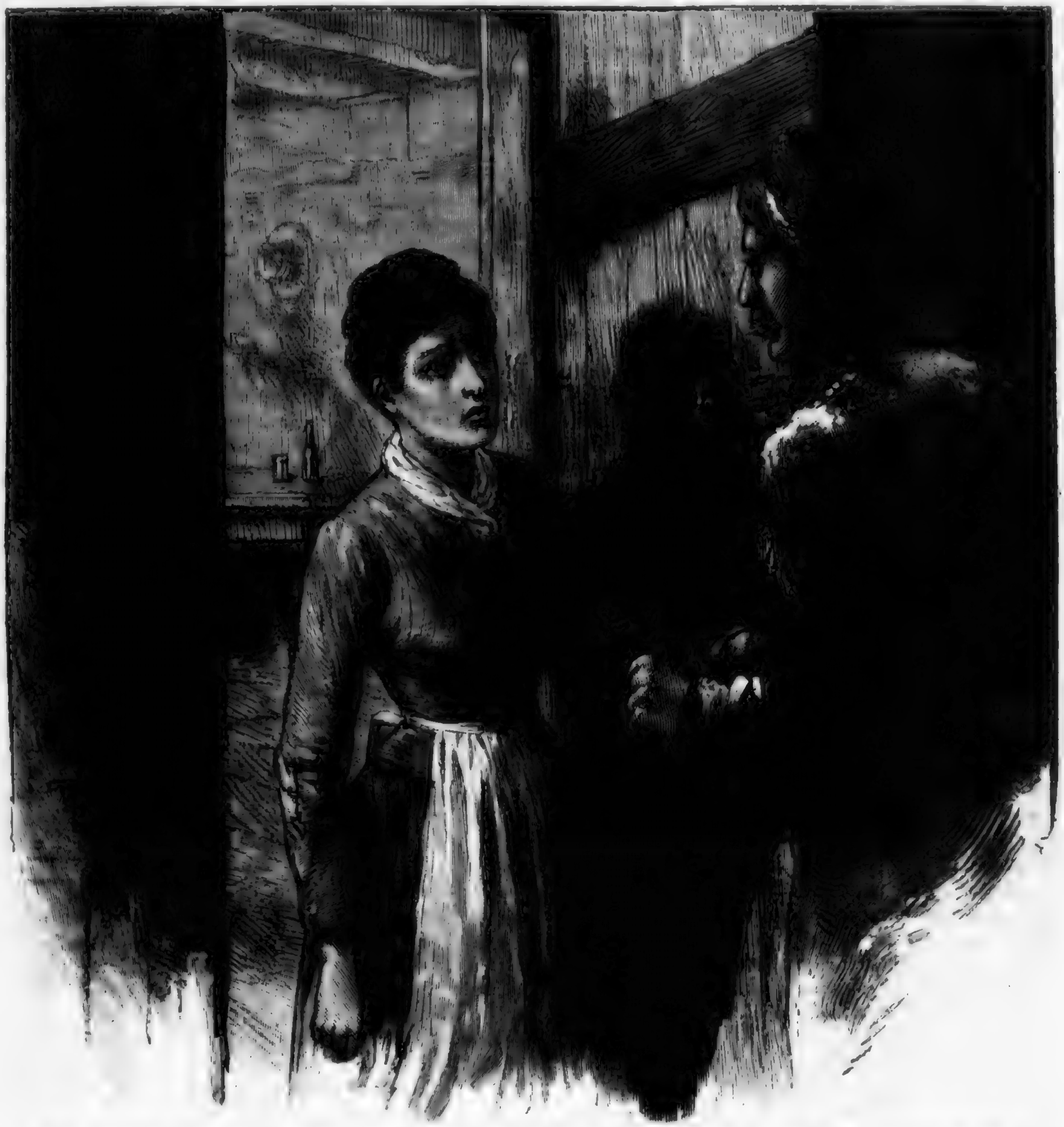
A curious privilege is that allotted to the "Jena students." It is no rare thing to meet them in the streets, in sleeping gowns instead of coats, long pipes reaching nearly to their feet, long-haired, high-booted, like the students of a century past. The thoroughfares resound with their songs and club-rooms swarm with their accomplished duelists. One might think himself in a university city of the Middle Ages rather than one of the present advanced day. But the most interesting privilege of all is the unique one described below. On the first production of Schiller's "Robbers," a century ago, the students received permission to sing the airs occurring in the piece. Through the varied changes of a hundred years the prerogative remained unrevoked until the father of the present Grand Duke conceived the traitorous idea. Last year, in the centenary anniversary of its first performance, the privilege was restored by Carl Alexander, the present prince. I was in Weimar at the time, and witnessed the rejoicings of the "Varsity boys." Several hundred seats were reserved for them, and gayly caparisoned in their fancy coats and little hats, swords and caps, they marched in. The overture finished, the "bemooste haupt" the moss-covered head, as the oldest corps student is reverentially called by his fellows) arose and commanded "*silentium!*" The dropping of a pin could have been heard. Color flushed the cheeks of admiring ladies. Then swelled from their breasts that glorious old college song "Gaudeamus Igitur," which, finding its birth in Jena years ago, has now spread to all seats of learning in the world. "The play may begin," resounded the order of the leader when the last note had died away. Throughout the performance, so soon as the actors began an air, up rose the "bemooste haupt" with "*Silentium!* we shall render that song," and the jolly students again filled the house. The orchestra was placed under the ban for the time being, and the players in their costumes sat about awkwardly enjoying the spectacle—a scene never presented in any other theatre.

At least a dozen times the audience was treated to this odd incident, and when the curtain fell, deafening and prolonged applause greeted the young fellows, in which none joined more heartily than the generous prince who had renewed the coveted prerogative.

XUM



MAGDALEN.—FROM THE PAINTING BY PIETRO DE ROTARI, DRESDEN GALLERY.



MRS. DEVEREAUX'S SECRET.—"THE DOOR HAD OPENED FAR ENOUGH FOR ME TO SEE THAT THE HAND WHICH SWAYED IT BELONGED TO A TALL YOUNG WOMAN, WITH DARK HAIR, DARK EYES, AND A PALE FACE."

MRS. DEVEREAUX'S SECRET.

By Theo. March.

Somewhere in her many wanderings to and fro, Mrs. Dirk Van Rennsel met Mrs. Devereaux. When, or where, or how, no one knew, but she first came to the surface quite as a matter of course, in Mrs. Dirk's delightful letters from Rome three years ago. Later, equally a matter of course with Mrs. Dirk, she sank into oblivion, and was heard of no more until last Winter, when she stepped bodily, and, with infinite grace, into the circle Mrs. Dirk had gathered at The Place.

She became the central idea of that circle from the first moment. Whether it walked, or drove, or danced, or flirted, it talked of her. Whether it wrote love letters, business letters, or mere gossip, it wrote of her. Of her beauty, her manner, her wardrobe, of her unknown past, her uncertain present, her hazy future, there was enough to say, and it was said. The thought of her was dropped into many a mind like a pebble into deeper or shallower waters, and the circling waves of surmise and hearsay spread and spread until they reached and touched young Schuyler Van Rennsell, Mrs. Dirk's brother-in-law.

He came to me at once, and said he was going down to The Place for the night. A tiresome case and a troublesome client had kept him in town through the holiday gayeties, and the countless cousins, with whom he was the favorite he deserved to be, had begged in vain for his presence.

"But, you see Laura," (I am a cousin—a Van Rennsel), "it is just as well to keep an eye on Julia. Who is this woman they are all talking about? What do you think of her? There is no telling whether she has Julia in her toils, or Julia is leading her a dance into No Man's

XUM

Land. Julia is very good in her way, you know, but her way is a bad one, sometimes, for other people."

He looked quite anxious and careworn. I knew he was thinking of certain episodes in Mrs. Dirk's past we had shared, and I hesitated what to say. But, finally, I told him he had better go down and see for himself, *then* come to me.

"Go down with me," he said. "It is a dismal day, of course, but I will telegraph, and we will manage to enjoy it. Do you like this Mrs. Devereaux?"

"Yes, I think I do," I answered, slowly. "I *know* so little of her, Schuyler, and——"

"And you are a Van Rennsel," he laughed. "That covers it all, Laura. What fools we are sometimes about such things! I am tired of it, but——"

"*You* are a Van Rennsel," I said, demurely.

He went away, amused, yet doleful. I am afraid, like many another girl of our set, I looked after him with eyes very ready to see his perfections, for he certainly made a great difference in the street as he walked down it. It even pulls a little at my heart now, when I recall that stately figure and that proud head, and I wish, just a little, that we were going off together this afternoon for "a good time" at The Place.

Not that *he* expected it to be very pleasant that time. Dirk Van Rennsel was Schuyler's idol always, and when, in dying, he left Mrs. Dirk to his care, he laid a heavy burden on shoulders only too willing to bear all and everything for him. She *is* the most provokingly delightful woman on earth, and poor Schuyler knows more of the provoking past than any one else. She had dragged him into no end of nonsensical unpleasantness, and he had no idea what awaited him.

It was a regular January day, of the song and story kind—rainy, blowy, sleety, snowy, and generally forlorn—but Schuyler telegraphed we were coming, and, of course, the ride down in the train was warm and comfortable. It was quite dark when we reached The Place, and I was so chilled and stiff from the drive over from the station, I could scarcely get out of the carriage. Schuyler stood waiting for me, and looking into the great hall which poured a flood of fireglow and lamplight out into our darkness.

"Mrs. Devereaux!" he exclaimed. "They have not done her justice!"

There she was. Just where the glow and warmth and comfort of the interior seemed brightest, she was coming slowly down the long stairway, dressed in a trailing robe of deep, lustrous golden hue. Her hand on the balustrade, her bright, dark eyes on the night without, her proud head lifted as though listening and waiting, yet scorning both, she stood for an instant in full view, and then passed on.

Schuyler drew a long breath.

"What do you think of her?" I whispered.

"They have not done her justice!" he repeated. "Not in the least!"

"That is all you will know of her—just how she looks," I said, "and she *always* looks superb!"

"Mrs. Van Rennsel is in the library," solemnly announced the servant.

"Schuyler Van Rennsel, you dearest boy! Come right up here and get kissed and scolded," called Mrs. Van Rennsel, over the balustrade. "Laura, you may come, too, but you are not a stranger."

That is Mrs. Dirk exactly. If she had not married Dirk Van Rennsel and lived among us so long, I should really think her very odd. She was not dressed yet, although the house was full of guests, and it lacked but a short time of the dinner hour. Schuyler mentioned this fact as she chattered on, but she only said it didn't matter. Mrs. Devereaux was there. People never wanted any one else.

"By-the-by," interrupted Schuyler; "who is Mrs. Devereaux, Julia?"

"I don't know. Ask her," she answered, instantly. "But you won't, you know. You will be quite content with looking at her and hearing her, won't he, Laura? I mean you to marry her, Schuyler—brought her here on purpose. That's the reason I am so provoked at you for not coming sooner," and she pouted in the pretty way we have too long excused, I think. Then she kissed him patronizingly, and sent us away to dress.

It took me some time, of course, and they were all in the drawing-room when I entered. The first thing I saw was Schuyler standing, alone and stately, near Mrs. Devereaux, who, for a wonder, was also alone and silent. She was leaning back in her chair holding a great white feather fan between her and the fire, and looking down into its glow. There was a shadow on her beauty, pathetic and regretful, for the first time, and it softened it wonderfully, as well as my heart. I never felt so much like liking her. But it was a bad thing for Schuyler. It softened him, too.

He took her in to dinner. I had a very pleasant partner, but I watched them closely. There was about their intercourse something odd and unreal, or I fancied it. I don't think I did, however.

It was late when we separated, and I had not time for a word with Schuyler. But the next morning we came up together, and we had our breakfast together long before the others were stirring. I asked him how he liked her, but he did not answer directly. He seemed more worried than ever, but it did not seem the same worry.

I did not see him after that for two weeks, but I heard he had been twice to The Place. I went down again at the end of that time and found the girls up in arms. Mrs. Devereaux had even captured Schuyler. "Our own Schuyler!" as Bertha Van Rennsel expressed it, mournfully. They had so much to tell me, and told it so differently, that I could not make up my mind whether he really had lost his head or his heart, or was only doing his best to find out who and what she was, for the rumors and suspicions gained ground each day.

"And Julia is *such* a fool!" flatly decided the outspoken Van Rennsel, who takes great liberties with her position.

Mrs. Devereaux looked worn and pale, I thought, and that shadow I had seen for a moment only, two weeks before, was permanent now. She came up to me with a cordial manner new to her, and something in it touched me. I am an impressible creature, and people who want sympathy always turn to me. I am beginning to suspect them of wanting it when they make any special approach. We sat together several times in the course of the day, and I liked her better each time.

Schuyler came down that night unexpected and without warning. We found him in the drawing-room when we came out from dinner. There was a great outcry and questioning, but I noticed Mrs. Devereaux did not join in it at all. She passed close to him once on her way to her favorite chair, and they bowed to each other without a word. I looked at him and saw him pale to the lips.

"Are you ill, Schuyler?" I asked him, as soon as I could. "Oh, what is it? I know there is *something*."

"What can there be?" he asked, coldly.

I said no more, and Bertha Van Rennsel came up just then, insisting on some explanation of his coming thus unannounced.

"You never did such a thing before, Schuyler, and I am sure there is a reason for it. Who is dead, or married, or eloped, or burned out? What catastrophe has overtaken the family? For, you know, you are in some sort its keeper."

She said it jestingly, and he answered, lightly:

"Nonsense, Bertha! Don't heap such honors upon me. I have been too busy lately to 'keep' anything but other people's secrets."

"Other people's secrets? Oh, *don't* keep them! Tell them to us, at least, and let us help you.'"

"Oh, do, Schuyler!" they cried. "Tell us some of your client stories. Since you *are* here, enliven us."

To my surprise he looked suddenly grave and determined. He glanced round the room as though unheeding them, and then turned to them.

"I *will* tell you a story—a 'client story,' as you call it; but it has no secret of his in it. It is just one of those singular workings of fate that would *read* like a romance, while it *is* sternest truth."

"How delicious!" they all exclaimed. "Do come here, Cousin Julia! Schuyler is going to tell us something—a true story like a romance. How perfectly lovely!"

I went over to Mrs. Devereaux and sat down by her. I *had* to, although I shrank from it. I would have liked to go away, but I had seen the light in his eyes as he looked at her, and I knew he meant to strike *her*. Why need he? Why did he? I could not understand. Did she?

Schuyler sat down presently, then rose and stood with his back against the pillar of the great fireplace. The fire blazed up suddenly, and he bent to put the logs closer, moved them, turned them, rose impatiently, and drove them back with one stamp of his foot. Mrs. Devereaux started and shuddered as though he had trampled upon her.

"We are all ready, Schuyler," said some one.

"Turn on the gas, old fellow!" said Tom Schuyler.

Then, of course, the younger ones laughed. (Why *will* young girls *always* laugh at such silly, vulgar sort of things? Tom Schuyler is encouraged in his low tastes by the simpletons.)

"When I was at college," began Schuyler. "But no! That is not the right end of the skein."

He threw himself into a chair, settled himself, rested his elbows on the cushioned arms, and laid the tips of his strong, delicate white hands together. They had a cruel look to me against the ruddy background of the fire, so cruel, so firm, so easily relentless their grasp could be.

"You all know that I have had a very tedious case about nothing in particular for some time past? Well, it is not over yet, but this story is a side issue. The case is about some property recently inherited—I mean within three years—by a crank, already rich enough to buy and sell half the Van Rennsels. There is a flaw of some kind in the will, and the old fellow is making a fight for what is of less value to him than my fee, principle. I suppose he will gain it—would not insult my own powers by a doubt!"

"*Why* does he not hurry?" I thought, in a fever of anticipation.

"But, in the meantime, I see a great deal of him, and I hear sometimes a great deal more than I care to of the old place. The other day I learned—what surprised me very much—that I had been to the very house, and, more, that I had an adventure of my very own under its roof. And now I take up the end of the skein I started with."

He moved a little, turned his face from us, but toward a small plate mirror on the opposite wall, in which I could see Mrs. Devereaux's face clearly reflected. She was unconscious of it.

"When I was in college, eight years ago, I joined a party of fellows for a month's sport in the mountains, and enjoyed it immensely. So much so that, the following Winter, about this time of the year, I concluded to take a run into the hill country and see it in its Winter dress. I was a sentimental young person, and the scenery and the mountains themselves had charms for me the rest of the party could not find—or did not. I returned to them. And they were not—not the same, that is."

"Oh, Schuyler, go on with your story. I am so impatient to get the interesting part!" pouted Bertha.

"Very well," he resumed, in an altered voice, and I knew the trifling was over. "I went up to the mountains about the middle of January, eight years ago. It was cold, and there had been snow on the level, but not much. To my surprise, the roads were almost impassable, and the wild, white desolation of the whole earth grew and grew as we went on. I had a driver and a good team, but we made little headway. The man finally suggested we had better turn back, and, after a little demur on my part, we *did* turn back—to our sorrow.

"We lost our way. Worse still, we did not know it, but wandered on, floundering through the storm, until it grew dark. Then, just as the gray of night was closing in fast and hard—no other word for it—we came out into a clearing, as we *thought*, on to the verge of a precipice, as we *found*. And, amid the utter whiteness of the valley at our feet, there gleamed one solitary light. It was close under us, but far, far below. We could not tell the size of the house which sheltered it, nor judge of those who fed its source from these surroundings. It was a beacon of hope, but we took its foundation on faith.

"It was necessary to lead the horses by a roundabout path, leaving the wagon where it stood, and, still keeping our eye upon the light, we started. It was a rough experience for me, but, after an hour of it, we came out of a clump of pines quite near the house and almost upon the level. Then my guide, for the first time in many minutes, uttered a word and an oath. The word was 'Rickefuses'! And I knew what he meant."

Mrs. Devereaux's fan snapped sharply and fell from its jeweled hand. There was a slight diversion of sympathy, examination, advice, which she cleverly and gracefully accepted and put aside.

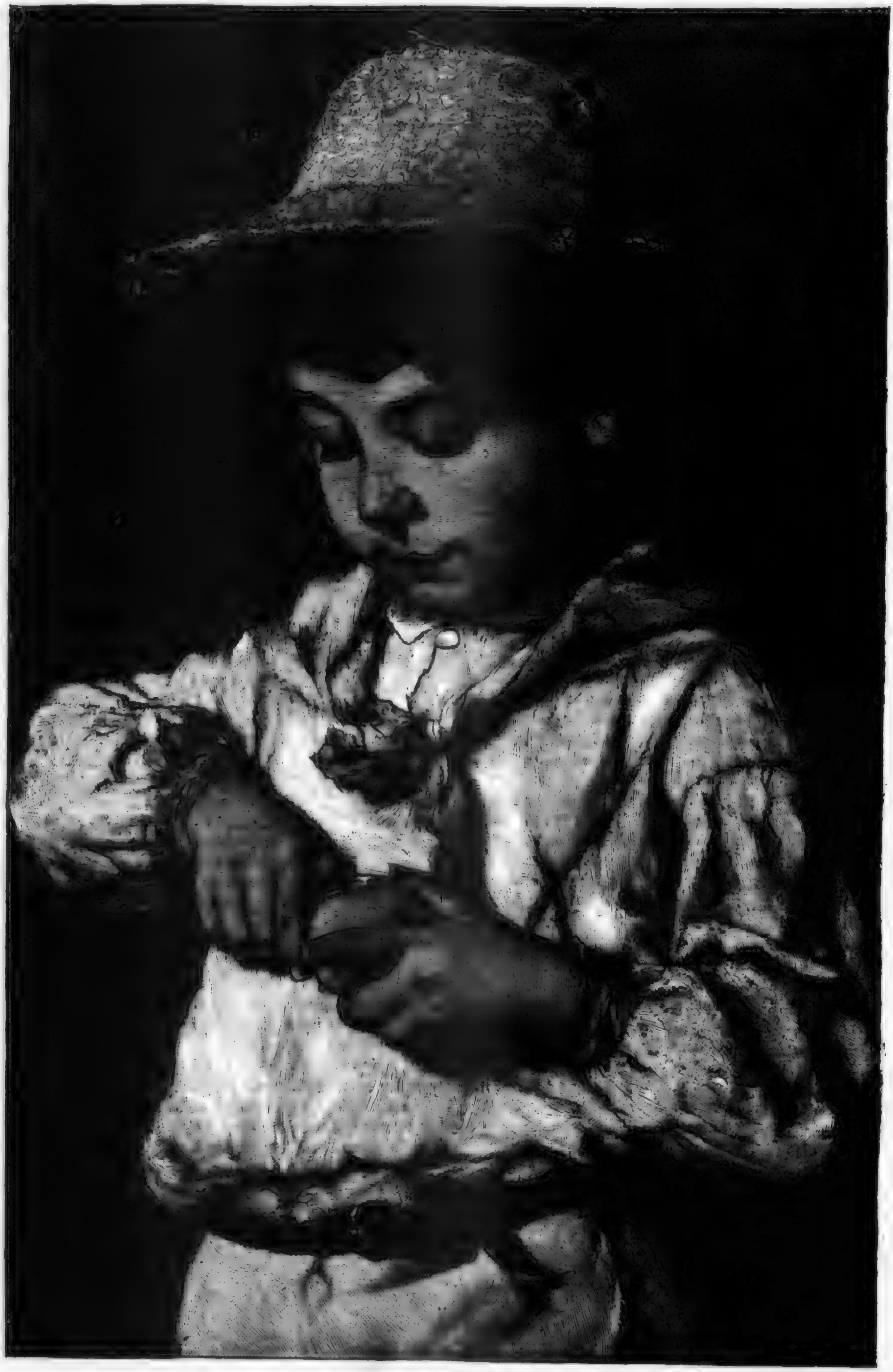
"It is of very little consequence," she said. "Thank you very much, Mr. Schuyler. Not at all, my dear Bertha. Pray do not let us lose time over it. Mr. Van Rennsel has been interrupted too long already. And we have reached the interesting part, I think."

He was standing before her. She raised her proud eyes to his, and smiled at him. He hurriedly resumed his chair, and at once took up the story.

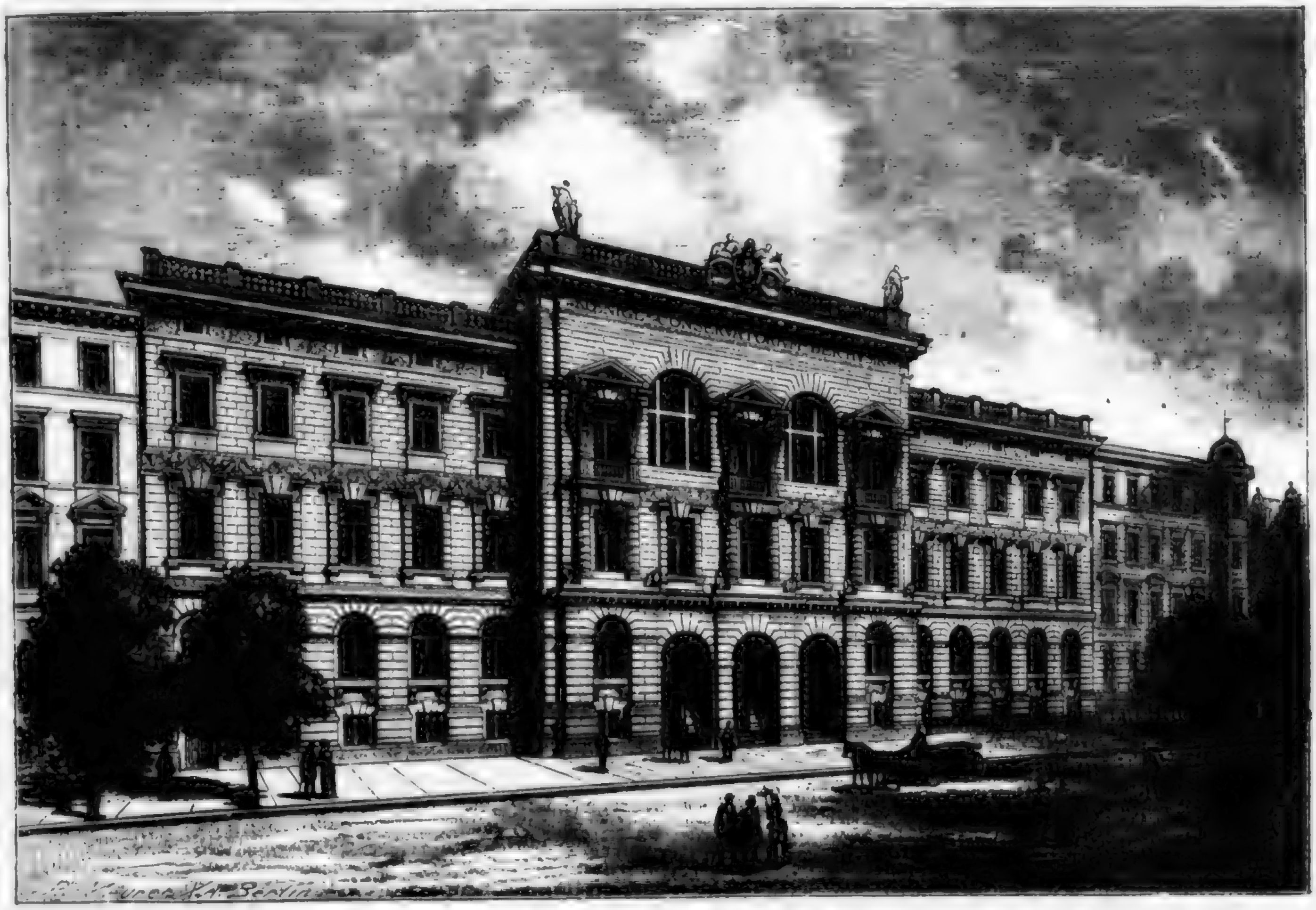
"'Rickefuse's' was a well known haunt of the country side. All sorts of evil deeds except murder had been traced to the wretched old man and his brood, both sons and daughters. And very few people would have cared to tempt them with a chance at murder had a booty worth the taking stood beyond it. My companion stood still and I beside him. But our case was desperate.

"'Will you risk it?' he asked me, presently.

"'With you?'



A VENETIAN BOY.—DRAWN BY V. BLAAS.

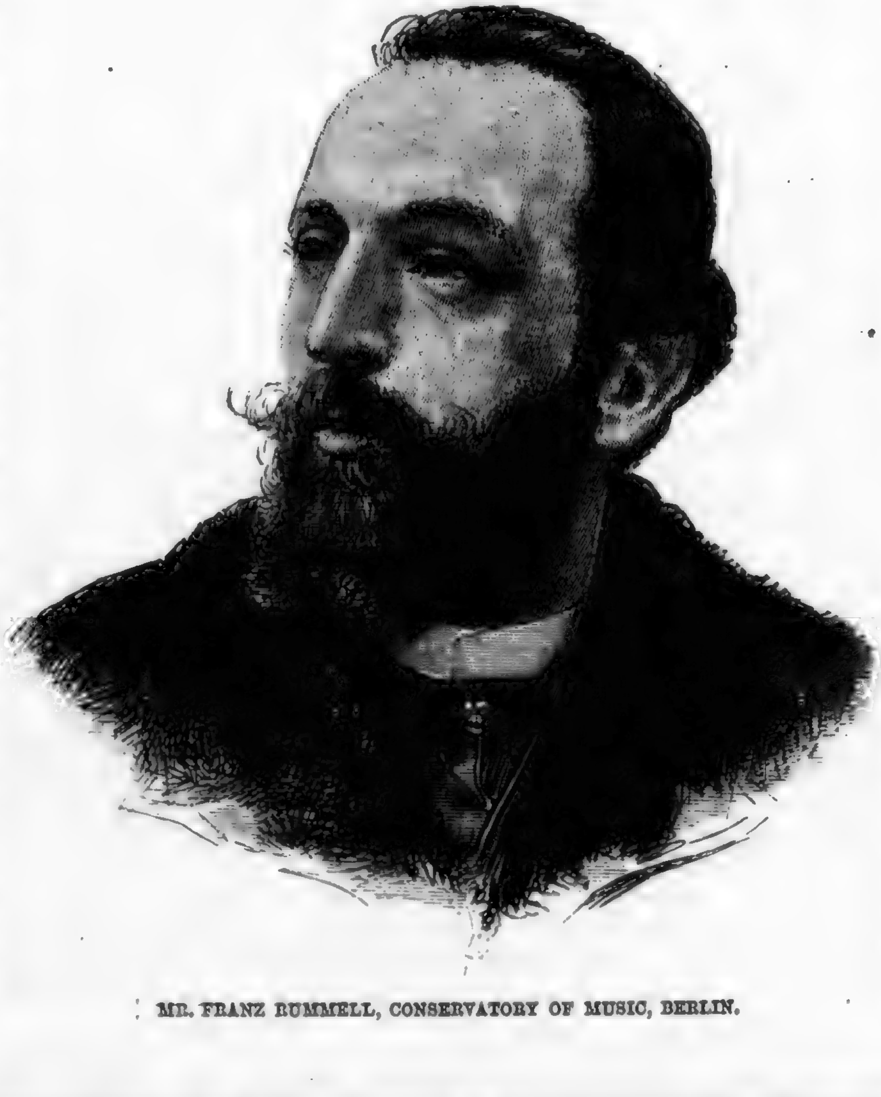


MODERN MUSIC-SCHOOLS.—THE NEW CONSERVATORY OF MUSIC AT LEIPSIC.—SEE PAGE 23.

"All right, then. Put your watch in your boot, and part of your money with it. Let 'em have the rest.'

"And we pushed on to the house.

"It was a large, square building, massive and imposing, and as we neared it I saw it was of stone, and had been handsomely finished. There were three doors on the side we approached—it had stopped snowing, and the whitened ground made a ghastly twilight of the night—but from two of them the steps had fallen away. The third and middle one I attacked with a strong hand, while my companion waited at the foot of the steps holding the horses.



MR. FRANZ RUMMELL, CONSERVATORY OF MUSIC, BERLIN.

"In a few minutes the door-latch rattled, bolts were drawn, the door creaked, and a glimmer of light shone through the widening crack. A woman's voice, very soft and somewhat peculiar—having a sort of accent, in fact—said, in low tones:

"'Henri'—the French name, mind—'is it you?'

"'No, madam,' I answered. 'We are strangers lost on the mountain, and are almost frozen.'

"The door shut quickly.

"'Madam,' I cried, 'I beg you to open the door to us. You have nothing to fear, and we *cannot* go further without assistance.

"The door creaked again and

XUM

hesitated; creaked again and longer. This time it had opened far enough for me to see that the hand which swayed it belonged to a young woman—a tall young woman, with dark hair, dark eyes, and a pale face—pale from want and watching and care and pain. A face sad to see, and sadder yet to turn away from without word or sign of pity or sympathy.

"'My husband is not within,' she said, appealingly. 'What can I do? There is nothing.'

"'Where's Mr. Rickefuse and the boys?' called out my companion.

The woman started at his voice, and would have closed the door with a hurried movement that fanned the lamp-flame to a sudden blaze. The glass chimney exploded with a loud report, and a woman screamed within the house.

"'Hold your tongue, ye fool!' I heard some one growl not far off.

"'Here, sir!' I called, stepping inside, past the door-keeper's slender figure. 'We are friends, you may rest assured, and sadly in need of friendly help. I am a New Yorker out for a little sport, and I have Jarvis from The Ridge with me. We lost our way in the storm.'

"The hall in which I stood was immense, and had been splendid. From some dark recess at its extremity there came forward a burly looking ruffian, in hat and great-coat, as though prepared for flight. I thought so, at least, at the moment. The woman stepped back from the door and stood waiting and listening near the lamp. The man eyed me thoroughly.

"'This here's a rough sort o' place,' he growled, 'and I didn't know who might be a-knockin'. Honest folks, 'tain't likely, wouldn't turn out sich a night.'

"'Not unless they were forced to it like yourself,' I said, coolly. 'You know Jarvis is an honest man, and he will go bail for me.'

"He laid his hand on the door and pulled it open with an oath.

"'You kin go to bed,' he said to the woman, and strode out.

From her place near the feeble light she looked at me with those despairing, maddening eyes. I thought I saw her lips move, but I heard no sound. I drew nearer to her, and cautiously, but she waved me back almost imperceptibly. I stood and looked at her, and waited.

"If I live a thousand years I can never forget her as I saw her there. She was so worn, so thin, so white, so haggard, she might have been a corpse. She was so poorly dressed, in such thin, tawdry clothing, I shivered for her. But she was clean, scrupulously clean, and her poor rags were patched and darned. Her hair, too, was swept away from her face and wound up carefully and daintily, coil after coil. She was very young with it all—a mere girl. And yet so old!"

He had told this last part word by word, as though driving each home to his hearers. I knew for *him* there was but one—the woman at my side with the broken pieces of her costly toy lying at her feet.

"In the meantime," he went on, rousing himself, "Jarvis and the man of the house had come to an understanding, and Jarvis looked in to say they were going to put up the horses. I saw him glance curiously at the woman, and find her a stranger. Then a voice was heard somewhere in the distance calling her by some odd, short name I could not catch. She turned her head toward the sound, bent it to me, and glided away. Jarvis and the man came in just then, and after barring the door, the man took up the lamp and we followed him into a back room. It was dirty and frowsy and greasy, but warm. I sat down near the fire, and thinking of the woman I fell asleep in my chair, and did not wake until broad day. Then Jarvis roused me, and the burly ruffian stood by him, grinning good-naturedly as any honest man."

He was silent. So were the others, until Bertha Van Rennsell cried, suddenly:

"Is *that* all? It *cannot* be! Who was the woman? Where was she? What became of her?"

"I never knew until yesterday."

"Yesterday?"

It was a regular chorus. But Mrs. Dirk and Mrs. Devereaux did not join it. They looked at each other.

"Yesterday!" he repeated. "You know, I spoke of 'the singular workings of fate'? 'All things come round,' as the poet sings. And only *yesterday* this knowledge came to me."

"Came?" broke in Mrs. Dirk. "You have not sought it, then?"

"Not exactly *this*," he answered, facing her. "I have sought *something*, but I did not connect the past and the present."

"Go on!" she said, curtly.

"Yesterday, the old gentleman who has the will in contest, came to see me, and produced a recent photograph of the property in question. I knew it at once as the Rickefuse's Den, decayed and ragged in tenfold degree as the years have made it, and evidently untenanted as it is. The old gentleman heard my reminiscence with interest, and gave me its history—the first thing of interest I have found in the case; as to the cleaning-out of the Rickefuses by the law-abiding population of the country-side, about four years ago. Information, it seems, of their guilty life and its growing evil was lodged with the authorities by the wife of a man who had been at one time a member of their gang—a horse-thief, housebreaker, highwayman and general rogue. The people could recall, when it was brought home to them, a young woman who spent several months at the Den eight or ten years ago. A tall, pale young woman, with a sad face, who never talked or 'made friends' in any chance encounter with the few neighbors who crossed her path. Since then, her husband had died. She had separated herself entirely from the old life, and—singular contradiction!—had gone abroad to live luxuriously on her ill-gotten gains, which, it seems, were considerable. I recognized, of course, the woman whose sad face has haunted me more than ever recently."

His gaze was on the face in the mirror. It was deadly pale, and the eyes turned with fierce entreaty on Mrs. Dirk. Every one in the room was conscious of something beneath the surface, and uneasy glances were exchanged, a score of questions trembling on the lips of every separate Van Rennsel. Mrs. Dirk was curled up, comfortable as a kitten, among the cushions of the sofa. She laid her cheek against the velvet of one and nestled closer to the down.

"You make one mistake, my dear boy," she said, easily and smoothly. "About the ill-gotten gains, you know. Henri Devereaux did not leave a cent, did he, Elise?"

An electric shock could not have startled the others more. I confess I was surprised, but not in the same way.

Mrs. Devereaux uttered no sound. She only turned and looked at Schuyler. No words *could* be more eloquent. The next moment he was at her side. He was bending over her, he was entreating her forgiveness—

goodness knows what he was *not* saying—and then, with a tenderness I never saw him show to any other in his utmost devotion, he led her from the room. I can see them now, passing away together down the long room, her slender figure drooping—but toward him—and his grand, protecting air seeming to shelter her from every wind of adversity. I may well recall it, for I never saw "our own Schuyler" again. There was "confusion worse confounded" behind them. Mrs. Dirk was perfectly beset. She did not mind it in the slightest. With half-closed eyes and laziest air, she listened and endured it. No one could accuse her of taking the slightest interest in their curiosity, their indignation, their exultation. Suddenly she awoke, sat up, straightened the cushions deliberately, spread out her dainty skirts, folded her hands and lifted her graceful little head.

"Good people!" she said, in her sweet, shrill, incisive voice; "listen to me! I have just a little speech to make, and it is meant for each and every one of you. It is the last you will hear from me on the subject. Three years and six months ago I was very ill in a dirty, forlorn, abominable Spanish town. So ill I would have died but for an angel of a woman, who was a stranger to me. She was passing through the town, stopped at the inn, heard of me, saw me, and remained to nurse me. She did nurse me—nursed me back to perfect health. We became, naturally, good friends, *very* good friends, and she told me her story. I—a Van Rennsel!—I had nothing to tell her in exchange, but I could understand her. Tonight Schuyler Van Rennsel has told you all *he* knows of that story, and added to it his own interpretation. As I mentioned to him, he was slightly mistaken. I had not time to enter into all particulars with him (and it will not be necessary); but, once for all, I will correct them for you. Mrs. Devereaux is the widow of Henri Devereaux, horse-thief, house-breaker, highwayman and general rogue. She is, likewise, the widow of Henri Devereaux, a French gentleman by birth—a sort of Van Rennsel over there, you know—who saw life out of the evil eyes of his father, the Devil (big D!—Van Rennsel *down there*, you know!) and she is, first and before all, the daughter and *heiress* of an old French family. She was married young. She fell upon evil days. She suffered there, she suffered here, she suffered there again. She was a faithful wife to a man she never loved. She was a faithful friend to me, a stranger, I have seen her in the honored heart of her French home. And," springing to her little feet and bringing one of them down with an angry click of its dainty little heel, "I have seen her *here*, in the heart of *my* home, tortured and stung, tortured and heart-wrung, tortured and *assailed!* I will never see it again! Let me see one look, let me hear one word unkind, slighting, suspicious, and I will sweep these '*ancestral halls*'"—oh, the emphasis!—"of every Van Rennsel, close those doors on them, and burn the old fossil to the ground, if I choose!"

Then she left us. You may think as you please of the whole proceeding, but I really never liked Julia Van Rennsel half so well as at that moment. And of one thing you may be sure, nothing was ever said or looked where Mrs. Devereaux or Mrs. Dirk could possibly hear or see, to which Mrs. Devereaux could object.

She did not come among us again for some time. The next day she was quite ill, and Schuyler was almost mad. The house was in gloom altogether, and Mrs. Dirk let it drift. But at the end of a week she "gathered the clan," as she said, gave a grand dinner, had a glorious evening, bade us all good-by, and went off with Mrs. Devereaux to Europe. Of course Schuyler followed them. And, of course, he married Mrs. Devereaux. Not a Van Rennsel raised an objection, either, for Mrs. Dirk was quite correct in all the statements of her "little speech."

MODERN MUSIC-SCHOOLS.

By S. Austen Pearce, Mus. Doc., Oxon.

The selection of a music-school sometimes leads to considerable perplexity.

Music is frequently termed "the universal art," and is supposed to affect equally persons of widely differing nationalities—rich and poor, learned and illiterate; it therefore seems necessary to point out that music is not found uniform in character in various times and climes.

Every great nation of antiquity had its own peculiar form of the art, and in modern times it has passed through many phases in different countries.

The platitude, "Human nature is the same in all ages," is often heard; yet music reveals strongly marked differences, even among individuals.

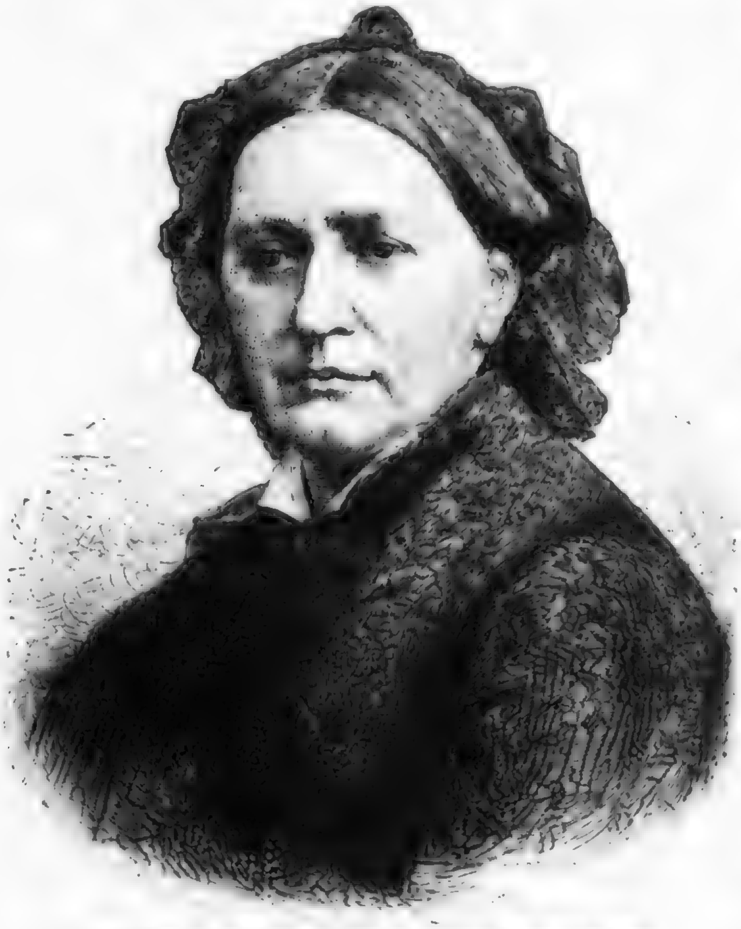
It appeals so directly and intimately to the whole nature of man—his mind, soul and sensuous perception—that it must necessarily present great varieties of manifestation. Note the comparatively calm and profound music of the Germanic races, the more passionate and less reflective utterances of the Latins, the voluptuous languor of the Creole songs, and the style of delivery peculiar to the Hungarian Gypsies, which is characterized by the wildest vehemence, the most maddening excitement; and it will be seen how readily one might lay the bearings of a scale of comparative National psychology by the aid of music. This art is so closely connected with other liberal arts, with science, with the religion, life and language of a people, that these must exercise a formative influence upon it and cause distinguishing peculiarities.

One music-school considers certain principles as of the very highest value; another ignores these, or regards them of minor importance, and exalts others. Hence, composers have shown the greatest deference to the claims of language, and created a sort of declamatory melody, disregarding the linguistic tone and expression almost entirely in favor of a purely musical or vocal display.

Thus the tonal art has been developed in many different directions, and its powers greatly varied and enhanced.

Students intending to follow music as a profession must decide on some particular branch of it, and accept the teaching of that school which has long excelled therein. In a general statement one would say, study vocalization in Italy, Symphonic music in Germany, opera styles and violin playing in France, and church music in the English cathedrals. Yet, some attention should be given to the music of all countries, to prevent onesidedness or contracted views; especially if the profession is to be exercised in America. For this is neutral ground. The people are by no means unanimous respecting the merits of the various European schools; and there is a certain sectarianism noticeable in several coteries, which the teacher, performer, composer or critic, must take into consideration.

XUM



MADAME CLARA SCHUMANN, FRANKFORT-ON-THE-MAIN.

The want of unanimity need not be deplored, for the artist demands freedom. The domination of a central authority in music, as in language, hinders progress. The principle of dialectic regeneration in speech, as stated by Professor Max Müller, not being allowed free play in France (where the decisions of the Academy in Paris have been accepted by the entire country), less growth is noticeable in this art of expression; and similarly, in music, Paris rules France. In Italy, on the contrary, greater variety, vitality and growth were early secured. For each large city had its own artistic aims, and carried them out freely. Hence, there arose the great schools of Naples, Rome, Milan, Florence, etc., which, engaged in a friendly rivalry, learned much by each others' successes and failures.

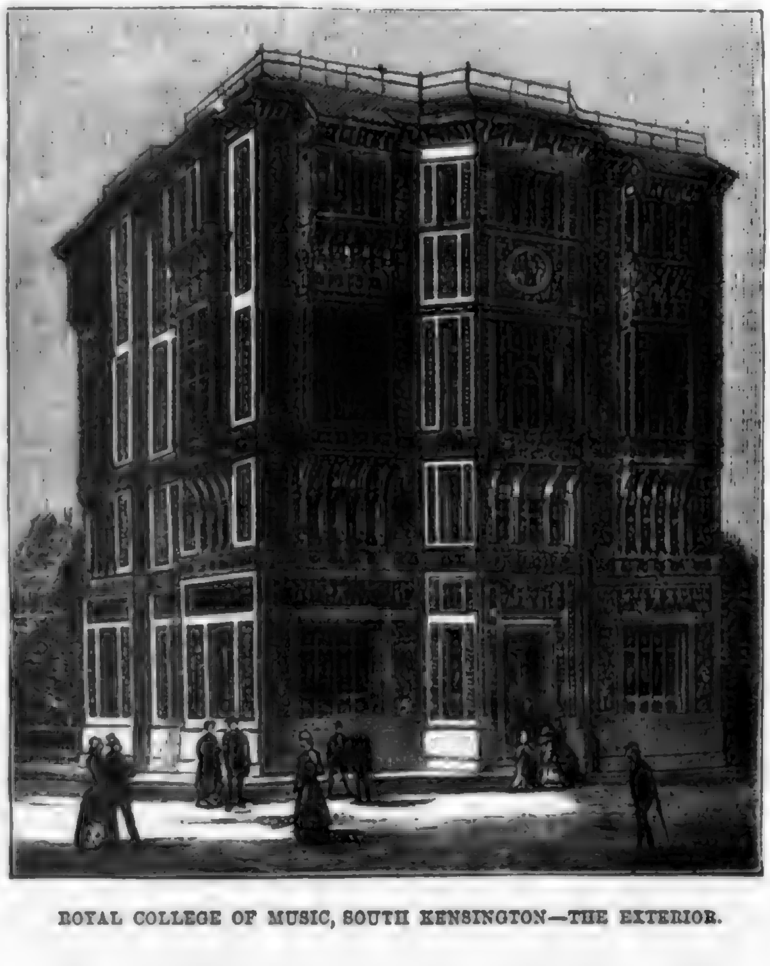
The contrapuntal teachings of the Netherlanders influenced in a marked degree the schools of Venice; as witness the works of the composers, Festa, Arkadelt, Giovanni Dalla Croce, Marcello, etc. The celebrated singers, Faustina Bordoni (born 1700) and Catarina Gabrielli (born 1730), bear witness to the peculiar excellences of the old methods of teaching vocalization. The Venetian masters were active in the four great schools of Bologna, but the Conservatories of these cities are now no more.

The Florentine school brought forth opera. Vicenzo Galileo (father of *the* Galileo) attacked those composers whose researches were directed toward the finding of elaborate contrapuntal progressions; and after the production of the first opera, which took place in that city, three or four works followed which gave in no uncertain manner the distinguishing peculiarities of the new style. The music was monodic, and therefore specially characterized by the absence of counterpoint (which distinguished the polyphonic school) and the employment of declamation in song, or recitative. It appeared as a protest, in the name of poetry, against the singing of different words simultaneously, and the prolongation of single, short syllables, to extend over long and labyrinthine progressions of tones.

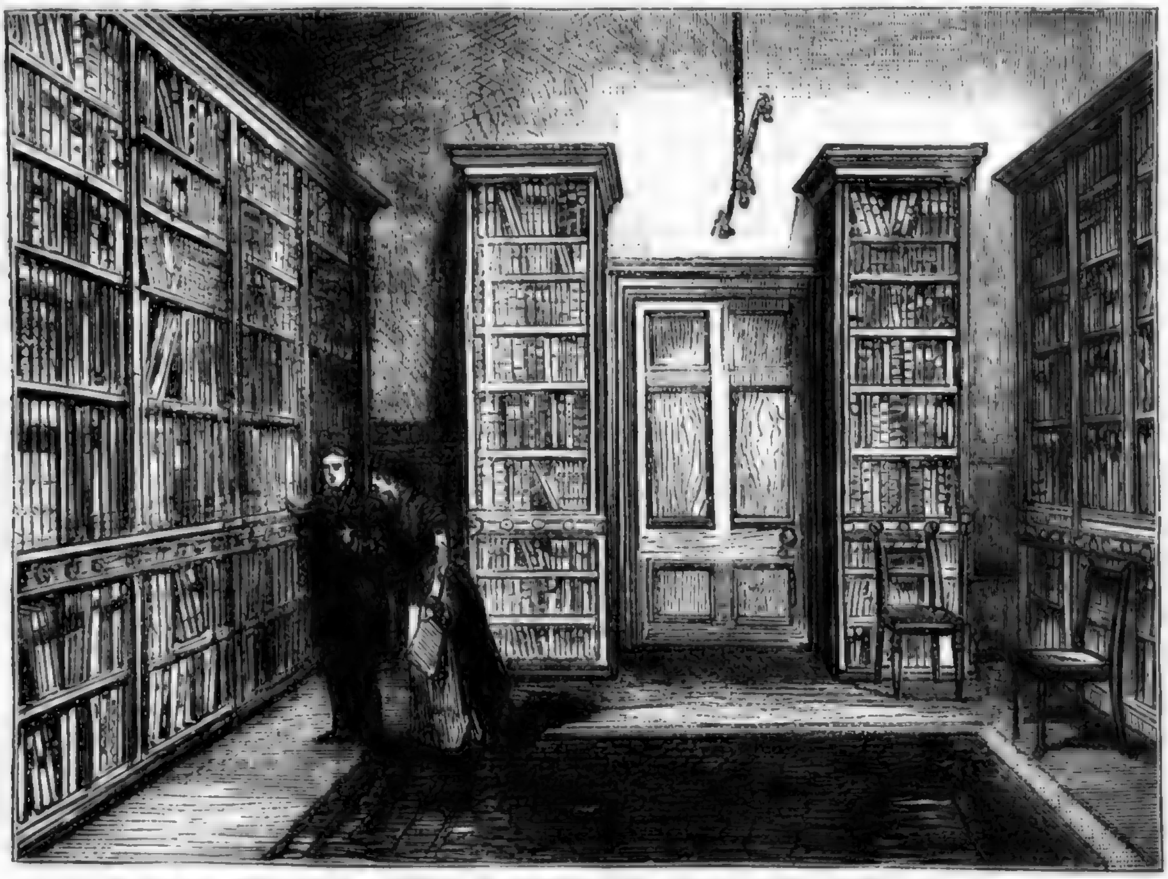
Monteverde, of Mantua (1568-1643), employed more musically scientific methods, and thus gained increased attention for this operatic style among learned writers.

The great schools of Naples seem to have been the models for all Europe, if we except the cathedral schools of England, which at an early age, educate children in the highest forms of the art. For the four principal ones were connected with four churches, the choristers singing in the services in return for instruction. Private benefactors enriched the schools, from time to time; but they were all subsequently suppressed, or merged into other institutions, for the study and practice of music in general. One of these church schools has among its honored names those of Alessandro Scarlatti, Porpora, Sacchini and Guglielmo. Another, those of Durante, Leo, Feo and Cotumacci, Piccini, Paisiello and Gizzi. The one connected with "Della Pieta de Turchini" was continued, until it was united with the Royal College, under the direction of Zingarelli, early in the present century. Donizetti and Mercadante succeeded Zingarelli as directors.

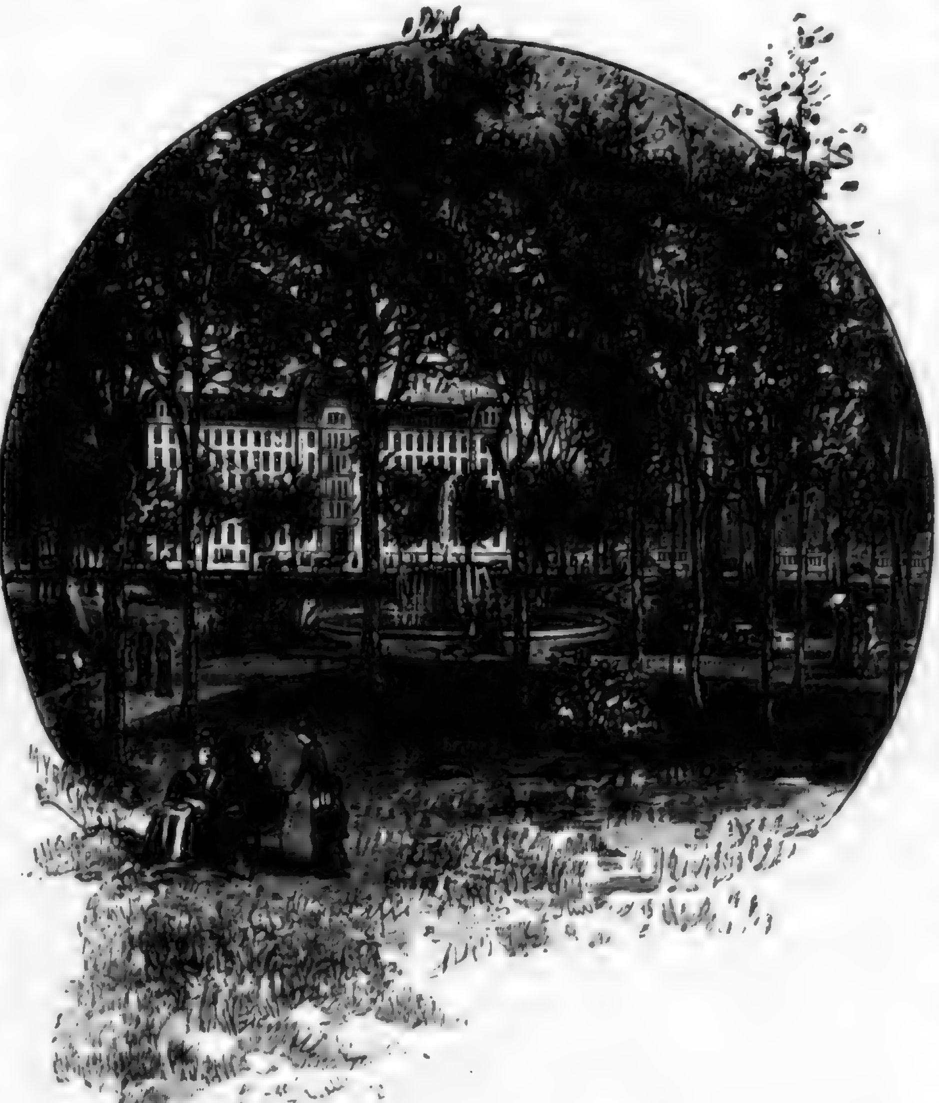
The schools of Lombardy are noted for the composers: Costanzo Porter, L. Balboo, and G. Gastoldi, who is famed for the elaboration of the ballet.



ROYAL COLLEGE OF MUSIC, SOUTH KENSINGTON—THE EXTERIOR.



THE ROYAL COLLEGE OF MUSIC, SOUTH KENSINGTON—THE LIBRARY OF MUSICAL WORKS.



CONSERVATORY OF MUSIC, BOSTON.

The Milanese school dates from 1483, when the Duke of Milan founded an institution. Its composers wrote for the Church, with the exception of a few that were engaged in opera. The present "Reale Conservatorio di Musico" is prosperous. There are over thirty professors, and the arrangements for admission of pupils are such as to keep up the standard of excellence. A preliminary examination is held for the admission of probationers, and at the end of the first year, a matriculation examination for probationers, seeking admission as pupils. The number of years allowed are nine, ten and eleven, respectively, for composition or stringed instruments, wind instruments and singing.

Throughout Italy, music, and especially singing, is taught by masters privately, rather than in great institutions. Large oratorio choruses and choral classes for the study of part-singing are rare. The great ecclesiastical music of the past is for the most part buried in silence, and counterpoint (an exotic, derived from the Northwest) music, after attaining a most luxuriant growth, is fast dying out. Wagner terms this neglect of counterpoint in church music "a lapse into paganism."

On the other hand, it should be noted that there has been considerable productive activity on the operatic stage. Witness, for instance, the works of Verdi, and other Italian writers, whose operas have been reproduced throughout Europe and the United States.

For the organ a number of original Italian compositions that have distinguishing national characteristics have appeared of late in the catalogues of English publishers. But they do not possess that nobility of style which in the West is considered essential in music for the "king of instruments."

The ambitious attempt of Verdi to write choral fugues in eight parts in his "Requiem," supplies evidence of the fact, that to invent sublime musical ideas one must be long accustomed to ponder the works of the great contrapuntists, and to write in accordance with their methods.

The Conservatory of Music and Dramatic Art, at Vienna, is a large and flourishing institution. There are more than 50 professors, and nearly 1,000 pupils. In the music department, for 1884-85, there were 699 students from the Austrian Provinces, and 51 from other countries, including America, Brazil, Germany, England, France, Greece, Italy, Roumania, Russia and Turkey. One hundred and four scholars paid no fees. In the dramatic school were 43 students. The programmes of the pupils' concerts show a preference for the well-known names of Mozart, Chopin, Schumann, Beethoven, Haydn, Weber and Mendelssohn. The dramatic school gives excerpts from the operas of Verdi, Gounod, Wagner, Meyerbeer and Weber. The financial scheme for the present year assumes an expenditure of 114,883 florins ($57,441.50), which is covered by pupils' fees, Royal Opera House extra fund, matriculation and examination fees, city support, state support, and subscriptions of members of the society.

In Hungary there is a national conservatorium of Magyar music at Budapest, where also two weekly musical journals are published. Liszt and Joachim were born in Hungary, and principally by their efforts the singular characteristics of the national music have become familiar in the West. The chief compositions are dances, songs and operas. In order to comprehend this music, so as to play it from memory and extemporize, or compose in the same style, it is necessary to have at least a theoretical knowledge of the Hungarian melodic scale and the harmonies it entertains, and also of the musical feet and rhythms that are commonly employed. But as the Hungarian language presents considerable difficulty to foreigners, it may be well to acquire this requisite knowledge elsewhere, say at Berlin. For at the High School of Music there, Professor Joachim (the celebrated violinist) is director, and provides instruction in Hungarian styles of writing. He, in company with Kiel, Rudorff, Schulze and Spitta form the directorate. For the half-yearly term of 1884-85 there were 217 pupils (principally for violin, voice and pianoforte), a fair proportion of whom were from the United States. The programmes of the pupils' concerts are similar to those in Vienna. In 1885 there were memorial performances of Schütz's "Seven Words of Jesus on the Cross," celebrating the three hundredth anniversary of the composer's birth, and Bach's cantata, "Christ Lag in Todesbanden"; and Handel's "Acis and Galatea," celebrating the two hundredth anniversary of the birthdays of these composers.

Terms are Easter and Michaelmas. Pupils are obliged to attend classes in elementary singing, composition and history. The fees are about 300 marks ($75) per term. It is said that the works of Brahms and Raff are more readily accepted here than at Leipsic, in consequence of the influence of a *clique.* In Leipsic there is said to be a Rubinstein *clique.* Hence, it is well to advise students to watch the proceedings in these rivals.

At Berlin, Mr. Franz Rummell has lately been appointed First Professor of the Pianoforte at the two Conservatories of Music of Kullak and Stern.

The Royal Conservatory of Music in Leipsic holds its matriculation examinations at the end of April. The course occupies three years. Twice every year a new course is begun in the lower classes; but foreigners will be admitted at other times than Easter and Michaelmas, although they receive notice of examination dates, etc., in foreign newspapers and musical journals. The fees are 300 marks ($75) per annum. Six free scholarships have been founded by the King, which are to be held by Saxons. The cost of a furnished lodging is estimated at 180 to 240 marks ($45 to $60) yearly. Plain dinners cost less than 25 cents. The total expenses of a student are from 1,350 to 1,800 marks a year. Special facilities and protection are afforded ladies speaking English only, and who will reside together with families accredited by the Council. A knowledge of German is necessary to understand the lectures, and of Italian for the higher branches of solo-singing. Students have free admission to the rehearsals of the twenty-two annual concerts in the Gewand Haus, and also to the performances of chamber music given therein. This Conservatory was established in 1843 by Mendelssohn. Hauptmann, Schumann, Ferd. David, Becker, Moscheles, Gade and Richter, have been professors. The list of pupils includes Kirchner, Otto Goldschmidt, Bargiel, Grimm, Barnet, Sullivan, Bache, Dannreuther, Mills, Pecher and Paine.

The fame of the Leipsic cantors is world-wide. At the head of the list stands the name of the greatest musician the modern world has produced (John Sebastian Bach), whose successors have striven to maintain the high artistic rank of the members of the Thomas school.

The great publishing firm of Breitkoft & Hartel, in Leipsic, offers many advantages to students.

The Conservatory for music in Stutgart was opened in 1857, to give the highest education in classic and modern art. Although it consists of an artist and an amateur school, the instruction is similar, the regulations only being diverse. The terms in the artist school are 300 marks per annum for a single instrument. Other instruction is included in this fee. The institution is under the patronage of the King of Würtemberg, and receives contributions from the state funds. Preliminary examinations are made in the early part of April and October. There is a large staff of professors. The instructors, Lebert and Stark, are well known by their excellent editions of classical music for the pianoforte. Among the pupils are many Americans who have have won recognition at home.

The Royal School at Munich prepares pupils for the stage and concert-room.

Dr. Hoch's Conservatorium, at Frankfort-on-the-Main, has the assistance of Dr. B. Scholz and Madame Clara Schumann. The examination is in German.

The Conservatorium at Cologne gained much from the fame of its director, Dr. Ferdinand Hiller, and that at Brussels from the celebrated violinist, Wieniawski.

The Conservatoire de Musique, in Paris, which was established in 1795 by the Convention Nationale, owes its existence to the exertions of Rodolphe, which began in 1775. Various departments were added from time to time until the close of the eighteenth century, when there were over 100 professors and 600 students. It was reorganized by Napoleon Bonaparte, and subsequently, in 1822, Cherubini had the co-operation of Fetis, Halevy, Panseron, Baillot, Kreutzer and Habeneck. In 1842, Auber, as director, was associated with Adolph Adam, Herz, Garcia and Arban. In 1871 Ambroise Thomas became director. Berlioz acted as librarian for many years, and was succeeded by Felicien David. The receipts are now estimated at from 200,000 to 250,000 francs. The curriculum is complete. There are very many instrumental classes, of which those for the violin have been extremely successful. In this institution, pupils who cannot be admitted to the classes are permitted to attend and listen. This arrangement appears worthy of universal adoption. Applications for admission are received early in October. In July, the competitions for prizes are made under the presidency of the Minister of Public Education and Fine Arts. The theatres attached to the offices in the Faubourg Poissonnière are used for the various academic exercises. Students have access to a pipe organ, with a thirty-two feet foundation; a museum of 700 instruments, and a library of 30,000 works. Here are many rare manuscripts, a complete collection of Palestrina's Masses, in single parts or proportional notation, and about 60,000 dramas. The music schools in Lille, Toulouse, Dijon, Nantes and Lyons, do not possess complete independence of action, but appear as tributaries or branches of the school in Paris. Such concentration tends to hinder growth from within, as already suggested. Hence, in France new ideas have been periodically grafted in from without; and French art has been rendered productive of new fruit through the advent of foreign composers. Recent history proves this. The heroic struggles of Berlioz to free himself from trammels form a most remarkable exception. The Italian, Lulli, was the father of the French opera. Other Italians and Jewish Germans succeeded him, and eventually French grand opera reigned supreme upon the lyric stage. The names of Gluck, Cherubini, Spontini and Meyerbeer, may be mentioned in this connection. Among the producers of lighter works for the theatres of Paris, which have become familiar throughout the world, may be recorded those of Rameau, Couperin, Boieldieu, Herold, Auber, Halevy, Adam, Paer, Mehul, Saint Saens.

The music schools of the English cathedrals have kept alive for centuries a love of choral music of the highest kind throughout the country, and to this day continue to produce composers, singers and organists, well acquainted with contrapuntal art. The names of Tallis, Morley, Gibbons, Lawes, Purcell, Arne, Arnold, Attwood, Crotch, Wesley, Aldrich and Boyce are familiar. The Protestant Church in America is indebted to them for chants, anthems and settings of the canticles for regular services. The labors of a younger school of musicians have also proved most useful, being directed to supply music suitable to the small Ritualistic churches (rather than large Gothic cathedrals having large open spaces, echoes, etc.); hence, they are better adapted to the requirements of our quartette choirs and general architecture. The works of Barnby, Tours, Sullivan, Bridge, Dykes, Stainer and Gadsby may be mentioned in this connection. Their works appeal to a more modern taste than those of their predecessors, while at the same time they are grave, restrained and dignified in character.

In the English Cathedrals the organ is treated with the utmost consideration, and the works performed upon it are nearly always in the highest style of contrapuntal imitation.

At an early age boys having good voices are taught to read music readily at sight, and to produce their tones with skill. In order to fill satisfactorily with tone the large Gothic structures, the singers learn to economize their breath, so as to sustain tones easily, leaving the solid stone walls to reinforce them; and hence a breadth of delivery is acquired that leads readily to the formation of the "grand style" which is imperatively demanded for the proper rendering of the oratorios of Handel. This style is traditional in England. The performances of the soprano parts of Bach's Passion Music entire, by chorister boys, recall the executive ability of the Leipsic cantor's own choir of children, which has always been considered noteworthy.

In the English Cathedrals, the boys usually study either the violin, pianoforte or organ, and receive lessons in harmony, fugue, and composition generally; and therefore find little difficulty, when their voices "break," in obtaining engagements, or scholarships and preferment. Should they remain in the Church, cathedral organistships are open to them; as in the case of Stainer, who is now at St. Paul's, and Bridge, at Westminster Abbey. If they become conductors or composers, advancement is easy, as in the case of Sullivan and Barnby.

The chief teaching institutions of London are the Royal Academy of Music and the Royal College. The former, in Tenterden Street, Hanover Square, was opened in 1822, and incorporated by Royal Charter in 1830. The Queen and nine members of the Royal Family are patrons. The Rev. Sir F. A. Gore Ouseley, Bart., Mus. Prof., Oxon., is one of the vice-presidents. There are twenty-two directors connected with the profession of music, and a committee of management, the chairman of which is Professor Sir George A. Macfarren, M.A., Mus. Doc., Cantab., et Mus. Doc., Oxon., who is also the Principal. The Faculty consists of 7 teachers of harmony and composition, 19 teachers of singing (including Garcia, Randegger, Shakespeare, Cumming and Pinsuti), 20 teachers of pianoforte, 4 for organ, 5 for violin, etc., etc.

Matriculation examinations are not only held in London, but in about one hundred towns in the United Kingdom, by local representatives. Students may choose their own instruments, etc., for principal study; but they may be required to perform on any orchestral instrument that is selected for them, in order that the students may give symphonic concerts unassisted. Singers must attend classes for elocution. The entrance-fee is five guineas. The fees for the entire course of study are eleven guineas per term. There are three terms per annum. No student is admitted for less than one year. All payments are made in advance, and notice of withdrawal must be given. No pupil is allowed to perform in public, or publish any composition, without permission. As marks of distinction successful students are appointed sub-professors, or are made associates or members of the Academy. Brinley Richards, W. G. Cusins, J. F. Barnet, Kate Loder, Agnes Zimmermann, etc., were "king's" scholars. Sir Arthur S. Sullivan was a "Mendelssohn" scholar. There are three "Sir Michael Costa" scholarships. One is worth £120 ($600) per annum, and two £40 ($200) each. They are for composers. Other scholarships are, the "Westmoreland" and "Parepa-Rosa," for vocalists; "Sterndale Bennett," for any branch; "Sir John Goss," for organists; "Lady Goldsmid," for lady pianists; "Balfe," for composers; "Thalberg," for pianists; "J. T. Welsh," for vocalists or instrumentalists; "Henry Smart," for organists and composers. There are several others for music in general; also, a "Potter" exhibition for pianists; a "Hine" gift for ballad writing, and many "prizes" for violin-playing, etc.

The Royal College of Music at Kensington Gore, S.W., resulted from a series of attempts to establish in the neighborhood of the First Exhibition of all Nations schools of different arts. The Prince Consort began by designing a "National Training School for Music" at South Kensington, in 1854. The institution was founded in 1873, and built in 1875. The following year fifty scholarships of £40 per annum, for five years, were established, and twenty more promised. A. S. Sullivan, the first principal, was succeeded by Dr. Stainer.

The Royal College was incorporated by Royal Charter under the presidency of the Prince of Wales. This college is the most formidable rival of the Royal Academy of Music, which has uniformly rejected all propositions to unite with the younger institution, notwithstanding many tempting ones, and the influence of royal personages exerted to form an alliance. The director is Sir George Grove. There are scholars, exhibitioners, and paying students, who all follow the same course of study. Attendance upon lectures on History, Construction of Instruments, etc., are compulsory. Concerts of orchestral, chamber and choral music are given regularly by the pupils. The examination fee is $5. The course of instruction extends over three years.

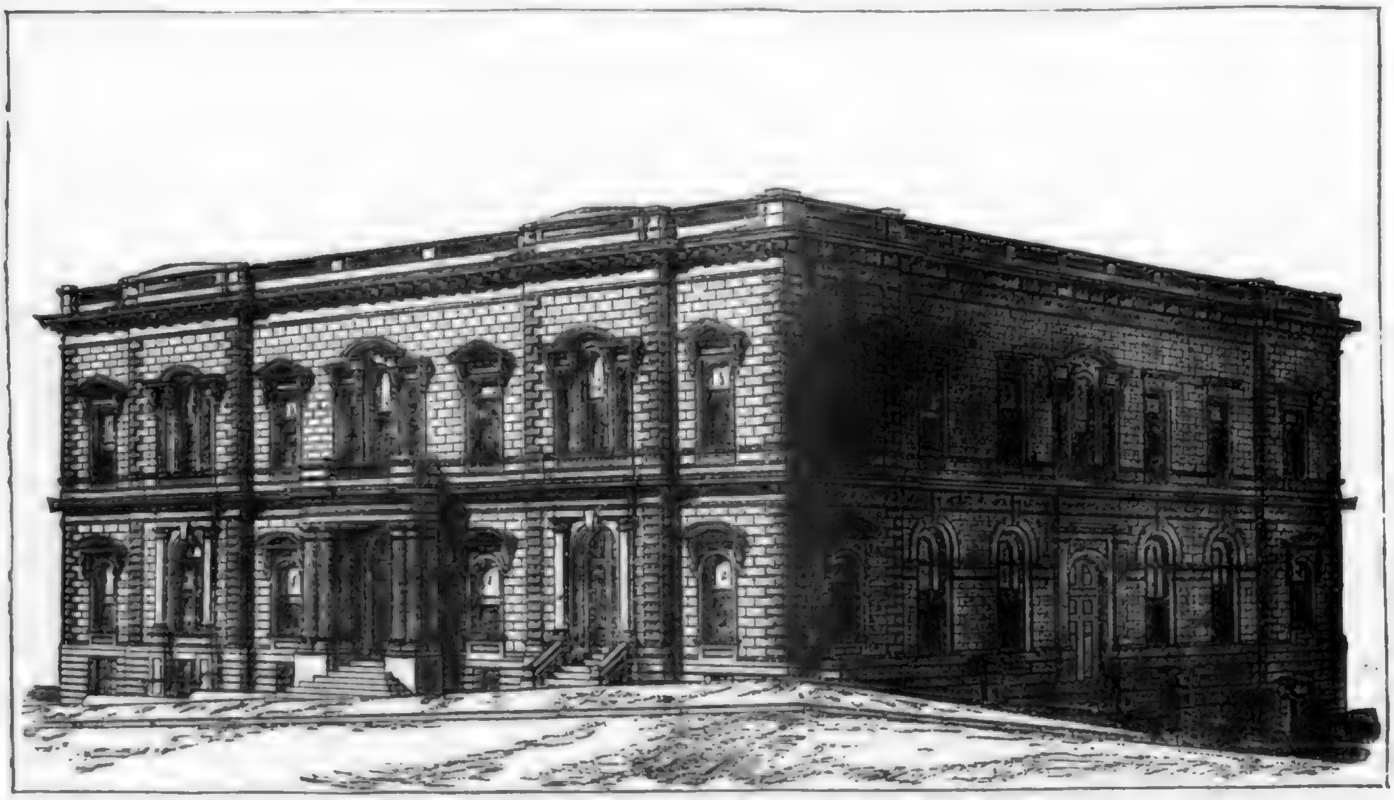
The London Academy of Music, St. George's Hall, Langham Place, with branches in West London and Brighton, has, under the very able direction of Professor Wylde, Mus. Doc., Cantab., accomplished much. The performances of new works by unknown composers, by the new Philharmonic Society, rendered signal service to English art.

The Military School, Kneller Hall, Hounslow, was established in 1837 by the Duke of Cambridge. There are fifty students, selected by the sergeants of military bands, who receive instructions for two years, fitting them to become bandmasters in the British Army. No others are eligible. There are 150 pupils who practice military band instruments for two years, and then rejoin their regiments.

To protect the public from professional quackery, examinations are held by the Faculties of teaching institutions. The Royal Academy holds every January a "metropolitan examination" of musical composers, or performers and teachers, who desire to be created Licentiates of the Academy, and obtain diplomas to that effect. The examination papers of former years may be had of the secretary for a few cents. The professional value of a good degree or diploma being highly estimated in England, some colleges act as examining bodies rather than educators.

The London University grants degrees in various faculties, but does not impart instruction.

Trinity College, Mandeville Place, Manchester Square, London, holds local examinations in musical knowledge in instrumental and vocal music for the diplomas of either licentiate of music, associate of music, associate pianist, associate organist or associate vocalist of T.C.L. (Trinity College, London). In 1881 the powers of the college were greatly extended.

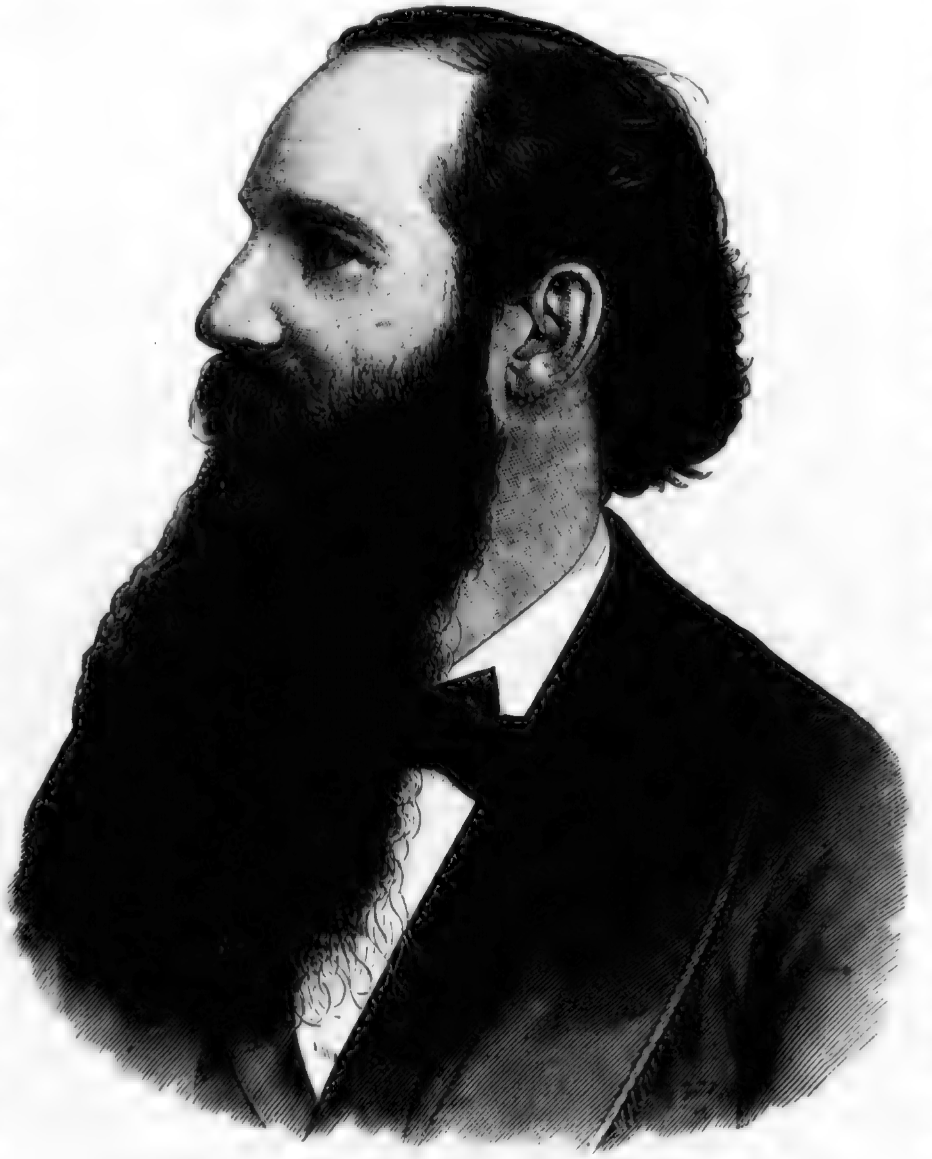


PEABODY INSTITUTE, BALTIMORE.

The certificates granted by the College of Organists, 95 Russell Street, W. C., are valuable to musicians intending to take charge of choirs in churches, cathedrals and college chapels. The college was incorporated in 1877 to protect professional organists.

The degrees of Trinity College, Dublin, are also specially intended for church musicians.

Candidates for musical degrees at Oxford University were originally required to show a knowledge of mathematical proportion in music, but no practical knowledge of the art. In 1500 each candidate was obliged to write a musical composition. For the degrees of Mus. Bac., Oxon, and Mus. Doc., Oxon., candidates are to this day not expected to sing, or play an instrument. All the examinations are in writing, or *viva voce*, and the compositions that are publicly performed need not be conducted by the candidate. In no case is the use of an instrument allowed in the written exercises in harmony, etc. The ability to invent in silence is essential to success. There is a preliminary examination in English, Mathematics, Latin, and either Greek, French, German or Italian, or the candidate must pass "responsions" or a "local examination." After matriculation (in Hilary Term) follows a preliminary examination in music, at which counterpoint in four parts must be well written. Then a composition, consisting of vocal fugues in five real parts, with accompaniments for strings (and occupying about thirty or forty minutes in performance), must be submitted for approval, together with statements that it is the exclusive work of the candidate. In about six months (Michaelmas Term) examinations must be passed in harmony, counterpoint, imitation, fugue, form, history and practical acquaintance proved with the orchestral scores of great masters. The fees are about £20 for the degree. The expense, however, of performing the exercise in the Music-School or Sheldonian Theatre, of copying parts, etc., for this, as for the Doctor's degree, is considerable. Certificates of seven years' study of music under credible masters must be produced, and a full score of the exercise must be deposited in the library of the Music-School prior to taking the degree. To proceed to the Doctorate, five years of continuous study must be shown, and examinations passed in acoustics, and higher branches of the subjects already noticed; and especially in the writing in silence a composition for an eight-part chorus on a given theme. The candidate must send in an oratorio, or other important work, containing a fair proportion of choral fugues for eight real parts, with accompaniments for a full orchestra, with declarations as before. These degrees are especially valuable to cathedral organists, church composers, and musicians connected with educational establishments.



CLARENCE EDDY, PRINCIPAL OF HERSHEY MUSICAL SCHOOL, CHICAGO.

The arrangements at the sister University, Cambridge, are similar, except that "caution money," £15 or £25, is paid, which is returned on receiving the degree. Honorary degrees in music are very rarely conferred by either University.

The advantages of residence in London are not easily overestimated. In consequence of the great wealth, and the liberality with which musical performances are encouraged, artists from all parts of the world congregate there in the season, and appear at the opera houses, the great Handel festivals, the daily concerts of the Crystal Palace, and those of various societies. Choral music is frequently rendered by thousands of well-trained singers. Competitions of the large Tonic-sol-fa singing classes, with those taught on the Hullah system, are publicly held. Many thousands of children, massed under the dome of St. Paul's, sing their songs and join in Handel's choruses with effects that are recorded by Berlioz.

Oratorios are heard in Gothic cathedrals, real trumpets in the symphonies of Beethoven, and the noble organs of Willis are presided over by men of high general attainments. Military bands unite with grand orchestras in a general consensus of instruments on festive occasions. Wagner's operas are presented under the direction of Richter as at Bayreuth. Two full choral services are heard daily in college chapels. Students absorb music.

The New England Conservatory of Music, Boston, Mass., consists of fifteen separate schools, including those of music, fine arts, general literature, elocution and dramatic art, languages and physical culture. There is also a beneficent society. It has rooms for 550 lady students, and outside accommodations for gentlemen; a large library, fine church-organs for practice, chapel and lecture-rooms, refectory, concert-hall, etc. Diplomas and certificates are awarded to successful students, and concerts are given from time to time by the pupils and professors. The fees vary from $5 to $40 per term of ten weeks. The highest classes for pianoforte, violin or voice are about $15 per term. The calendar for year ending June 27th, 1885, gives a total of 2,005 pupils from the various States, British provinces, and foreign countries. The staff of professors, etc., is large and complete.

The New York College of Music, 163 East Seventieth Street, incorporated by the State of New York in 1878, is under the direction of Louis Alexander (late of the Philharmonic Society). The musical director is Theodore

XUM

Thomas. The college building is freehold, and accommodates 700 students. The new concert-hall annexed is in constant use for lectures, choral classes, concerts, etc. Rafael Joseffy was originally principal professor of the pianoforte department. His successor is Edmund Neupert (formerly first professor at the Imperial Conservatory, St. Petersburg). Members of the Philharmonic Orchestra give lessons on various instruments. No lessons are given in classes except sight reading, theory and composition. The uniform fee is $30 per term.

The National Conservatory of Music of America is the legal and corporate name of what is popularly known as the American School of Opera, which is due to the persistence, liberality and progressive spirit of one woman —Mrs. F. B. Thurber—who originated the scheme, influenced her friends in its favor, and has been the leading spirit of the enterprise from the start. She gathered to her aid many well-known citizens of New York, and the matter was thoroughly discussed and judged to be feasible, and at a meeting held in Delmonico's, October 27th, 1885, a formal organization was made. Among the trustees and incorporators are the following: Mrs. August Belmont, Mrs. William T. Blodgett, Mrs. Richard Irvin, Jr., Mrs. Thomas W. Ward, Mrs. Francis B. Thurber; Mr. August Belmont, Mr. Andrew Carnegie, Mr. William K. Vanderbilt, Mr. Henry G. Marquand, Mr. Parke Godwin, Mr. Joseph W. Drexel, Mr. Jesse Seligman, Mr. Theodore Thomas, Mr. Francis B. Thurber, Mr. Richard Irvin, Jr., Judge William G. Choate, Hon. William R. Grace, Mayor of the City of New York; Hon. Seth Low, ex-Mayor of the City of Brooklyn; Mr. Henry P. Higginson, of Boston; Mr. Harrison Garrett, of Baltimore; Mr. N. K. Fairbanks, of Chicago; Mr. Timothy Hopkins, of San Francisco; Mr. A. Howard Hinkle, of Cincinnati; Mr. Leopold Methudy, of St. Louis; Mr. A. F. Tripp, of Buffalo, etc.

At a meeting of the trustees the following permanent officers were elected: *President*, Parke Godwin; *Vice-president*, August Belmont; *Treasurer*, Richard Irvin, Jr.; *Executive Committee*—Mrs. Thurber, Mrs. Blodgett, Mrs. Ward, Mrs. Carnegie and Mr. Marquand.

Madame Fursch-Madi was chosen Directoress of the School, and J. Bouhy, of Brussels, Professor of Opera. Monsieur Mamert Bibeyran was appointed Instructor of the Ballet.

On December 1st, 2d, 3d and 4th the first examinations for admission to the school were held, and many candidates applied on those days. Those who were accepted were at once put to work learning the choruses of the operas in the repertory of the American Opera Company, which began its season on January 4th, 1886.

Active work in the school began on December 14th, and then began what may and probably will result in the formation of a distinctively national school of music.

While the American Opera Company and the National Conservatory of Music are absolutely distinct, they have a bond of union in the fact that the same spirits are guiding both, and the best scholars of the conservatory will be given opportunity to achieve public triumphs in the opera company as soloists or chorus singers, as their merits will allow.

This scheme of Mrs. Thurber's is the third of the kind which she has originated; it is now upon the most prosperous basis, and every patriotic music lover must wish it success.

The Peabody Institute at Baltimore has a large conservatory of music under the direction of Asger Hamerik. There is a matriculation examination. The fees for theory are $30 per annum; for singing, $50; and for pianoforte, $50. The course of study occupies three years, when diplomas are awarded to successful students. The large library of the Peabody Institute offers facilities to musical students. The entire endowment fund was $1,240,000. Professor Faelten gives pianoforte recitals, and the director lectures on history.

Dr. S. Austen Pearce, of New York, has delivered lectures on "The Music of all Nations" in the Peabody Hall, and other artists of New York and the principal centres of civilization in America have been engaged to assist at the six annual rehearsals and concerts of classical music given by the full orchestra of the conservatory. The many concerts of the pupils are mostly for the performance of the highest kind of music.

The College of Music of Cincinnati is an eleemosynary institution, handsomely endowed by Reuben R. Springer and the citizens. The receipts for 1885 were $65,000, and expenditures, $60,000; the assets, $235,410; and liabilities, $17,939. The college gives, each season, without charge, 16,400 lessons, irrespective of free scholarships. There are weekly concerts, at which all the pupils perform, and also public concerts for the graduating classes. The college adjoins the large music-hall, which contains an organ having four rows of keys and complete pedal organ. In consequence of the increase in the number of pupils, Mr. Springer's last gift was the sum of $20,000 for the construction of a smaller concert-hall and about twenty rooms for classes.

Charles Baetens and Otto Singer are prominent professors. There is an academic department, intended for professional students, in which there is a reduction of terms, and a general music school for beginners and amateurs. Dramatic and opera festivals are held from time to time. The receipts from one held in 1883 are quoted in the accounts as amounting to $4,000.

The Hershey School of Music at Chicago, Illinois, of which Clarence Eddy is principal, and Richard Grant Gleason pianoforte professor, has a large concert-hall in which concerts and organ recitals are frequently given, demands special notice. American students may readily obtain, through the book post, particulars of this and other musical colleges in the country, which want of space forbids us to mention.

Perhaps the greatest difficulty experienced by students is in the choice of a school for singing. In England, the "Tonic-sol-fa" method has proved very successful. It is based upon the ability of every one to recognize any note of a scale by identifying its character. Hence a peculiar and definite signification is ascribed to each, and this is made clear by the use of language. Thus, the tonic is a strong note; the seventh of the scale, is an aspiring note, etc. That hundreds of pupils in classes consent, that the descriptions given by the teachers are satisfactory, and that great practical results ensue, demonstrates the fact that the experiences of pupils are so far uniform. This is teaching music on a psychic basis; and has many advantages besides being fascinating. But the system is opposed on practical grounds by Mr. Theodore Thomas, who has had great experience as a conductor, The perplexity attending choice is increased when a school of voice-production is required. In one, the old Italian method (as far as known) is promised; in another, a quasi-scientific method, based on the researches of the physiologist; or no attempt is made at explanation, but the pupils are taught to imitate or follow blindly some few instructions and to practice exercises.

In some methods there are elaborate breathing exercises—several modes of inflation being carefully distinguished—and women are taught to breathe as men. In others, little if any attention is paid to such matters. Some schools teach that there are various registers; and others that there are no "breaks" in human voices. Some regard the *falsetto* voice in men as valuable; others ridicule it. Some advocate the raising and others the depression of the larnyx. Some advocate the singing of notes on particular vowels; and others, the beginning of all tones with particular initial consonants. Some strive to impart power, and the production of high notes, as demanded by our large concert halls and orchestras, and greatly raised pitch; while others teach pupils to study to obtain a beautiful and "sympathetic" quality of tone, etc.

At the Royal Conservatory of Music in Dresden, which is under the protection of His Majesty King Albert (Von Sachsen), there are departments for intending professionals, amateurs, and children of seven years. For entrance to the various schools, matriculation examinations must be passed, and the physical qualifications must be found satisfactory, especially for the dramatic schools and singing schools. The annual fees for the theoretical or instrumental school are 300 marks; for the dramatic school, 350; for solo singing, 400 marks; and for the operatic school, 500 marks; which sums are paid in advance in three installments.

A furnished apartment in Dresden costs from 180 to 240 marks annually; a dinner costs one mark or less. Full board, lodging and washing, cost ladies from 800 to 1,000 marks per year in respectable families.

On reading the lives of the great singers it is found that many of them, especially "the *Queens* of Song" had, originally, voices very limited in power and range, and rough or otherwise unpleasant in character, and only by the skill of their masters were these defects overcome. Elsewhere we hear of voices, full of early promise, being ruined and their possessors embittered for art and life from misguided efforts. The Old Italian masters succeeded well, but Italian opera companies at the present day are made up of vocalists of many different nationalities. The German method of singing has been continuously stigmatized. Wagner tried to establish a distinct school for Saxon melody at Munich, with the assistance of Bulow, but without success. Yet the artists of the German Opera Company in New York have sung continuously for weeks, operas by Wagner and other writers who make great demands upon the physical strength of singers, without once disappointing the public, or giving any indications of waning powers. They have attended many rehearsals, as well as performances, and sung against a greatly enlarged orchestra in a vast and crowded opera house.

For the singer, there is no royal road to success.

One of the first recollections of Mary Somerville, the celebrated astronomer and mathematician, was of an evening when, as her little brother lay on the floor, he suddenly jumped up, crying, "Oh, mamma, there's the moon running away!" while every one hastened to the door to behold the fiery course of the celebrated meteor of 1783. The event may possibly have had something to do with the shaping of her career.

It was a pertinent and forcible observation of Napoleon the Great "that a handsome woman pleases the eye, but a good woman pleases the heart. The one is a jewel, and the other a treasure." And Lord Bacon adds that the best part of beauty is that which a picture cannot paint.

A TURKISH DINNER ON THE NILE.

Not long ago I was talking with a friend who has been a wanderer like myself in many lands. We had been chatting of the Corniche Road and drifted along to beautiful Florence, and settled down in a beautiful Roman villa with giant stone pines standing at the gates —"mute, motionless, like souls in Hades waiting their sentence of condemnation." (Ruskin's simile is very apt and beautiful.) Presently we spoke of Egypt, and my friend told me she was the only lady to whom was given a Turkish dinner on the Nile, and it came about in a very funny way.

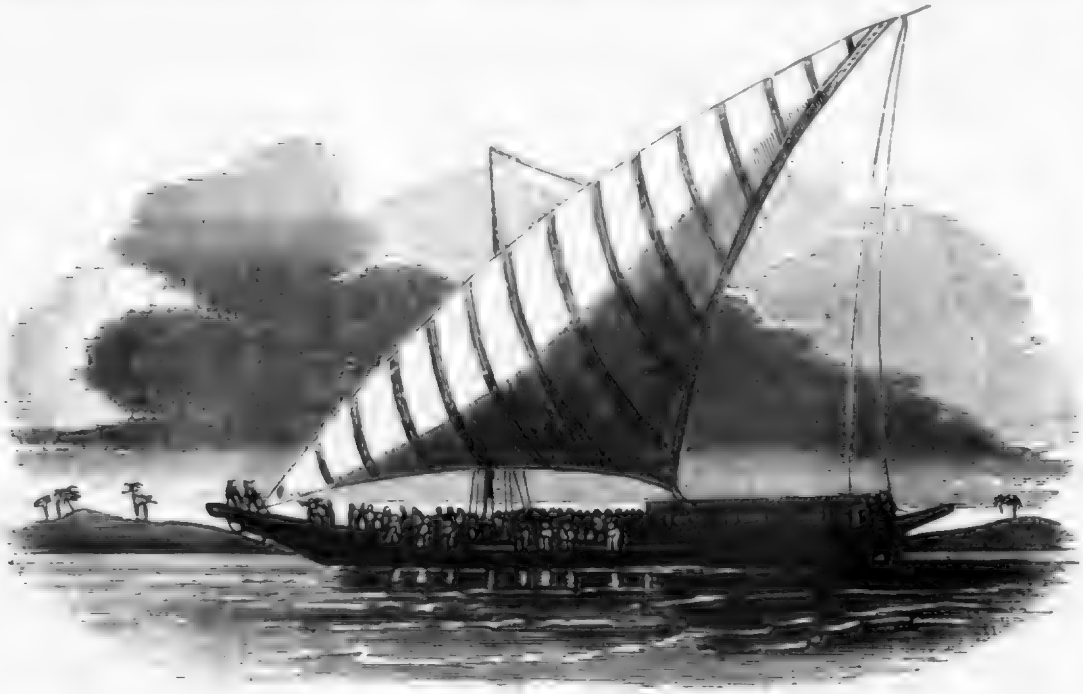
The Nile trip is usually made in Winter, for which purpose a "dahabieh" or Nile boat, with dragoman and crew are engaged. The dragoman is a sort of jack-of-all-trades. He has to cater for the table *en route*, to lay in provisions, besides superintending the boatmen—no light task in itself—and last, but not least, acting as interpreter and guide. In this case, the dragoman was a Syrian and a trustworthy man, who did all the above duties and one more—he actually kept the boat clean. In Egypt, or Florida for that matter, insect life becomes a nuisance, and unless checked, becomes unbearable. The secret in this case was simply a strong solution of carbolic acid daily. A sort of canopy was arranged so that the two ladies—my friend had a companion—could take their meals in comfort under it, while the walls of the sitting-room were comfortably lined with chintz and decorated with sketches.

The usual mode of travel is to sail up the stream and row back. A party of English and American artists had engaged another dahabieh and proposed to keep one another company, but unfortunately they got aground the first day, and did not meet for months afterward. Of course, the principal interest of Egyptian travel is historic. Here you are face to face with the labor of men in the early twilight of the world: The Pyramids; the Sphinx—Memnon; the wonderful temples, whose sculptured walls have echoed to the shouts of the populace when Apis, the sacred bull, was marched in procession of priests and maidens, the latter strewing flowers and palm-boughs for his sacred feet to tread on. All these voices are silent, and the far-off lion's roar or hyena's scream has taken their place. The chameleon basks on the altar, but yon mummy, swathed in bands 3,000 years old, cannot bridge the space or tell us anything except that *once it was.*

On one occasion my friend, who was in the habit of going ashore with the dragoman, came suddenly, among the rocks, upon a camp of genuine wild Bedouin Arabs. The dragoman didn't quite like the look of things, but retreat was too late, and so they boldly went up, and the Bedouins regretted their women were absent, who would have cooked them something had they been home, but offered bread and salt, which was partaken of—a declination would have been considered a grave breach of etiquette. Hospitality is a necessary virtue to children of the Desert, either in Arabia or Arizona. Returning to the boat, the women and children were met, and not one asked for "backsheesh"; "which was the reason I gave it," said my friend.

Arriving at Thebes, the same courtesy received at all other points was extended the two ladies—a courtesy that culminated in an invitation to a Turkish dinner, if such would be acceptable. It was decided to accept it on the return trip, as more time could be relied on.

Passing Thebes to the Cataracts, my friend said to the dragoman: "Abdallah, why is it we are received so



A DAHABIEH OF THE NILE.

kindly, and treated so considerately? Is this always the case, or is it because we are two ladies?" Abdallah, replied, bowing low, "That instructions were sent ahead to the effect that Lady ———, the wife of a great American personage, and friend, were to be treated as befitted their rank and station, and any accident occurring, the same was to be immediately reported by special messenger, and every attention possible shown them." And what was the cause of this special "firman" on behalf of a simple American lady and her friend? Simply this. My friend was the wife of a United States Senator, and the passport was a little more red-tapeish than usual. The regular agent was away at Cairo, and was temporarily personated by a Frenchman who could not read English, but who immediately jumped to the conclusion that here was somebody, and gave orders accordingly. So, when the dahabieh, on the return trip, tied up at Thebes, the Turkish agent made everything agreeable, and asked my friend if she had any others who would join her in a Turkish dinner at his house. At her suggestion the artists were invited, and the following evening found my friend, with her dragoman for waiter, her companion with an attendant, the four artists respectively attended, and a New York gentleman who had resided in Thebes for nearly a score of years, as interpreter.

Of course no native ladies were visible, although probably from some "coign of vantage" they had a glimpse of the foreigners. The dinner was served in a capacious room, no chairs being a decided novelty, but instead comfortable cushions. My friend was placed next the Turkish agent, having the American-Egyptian on her left; next, her companion, Miss C——, and then the artistic set completed the circle. And now, what do you imagine was the bill of fare?

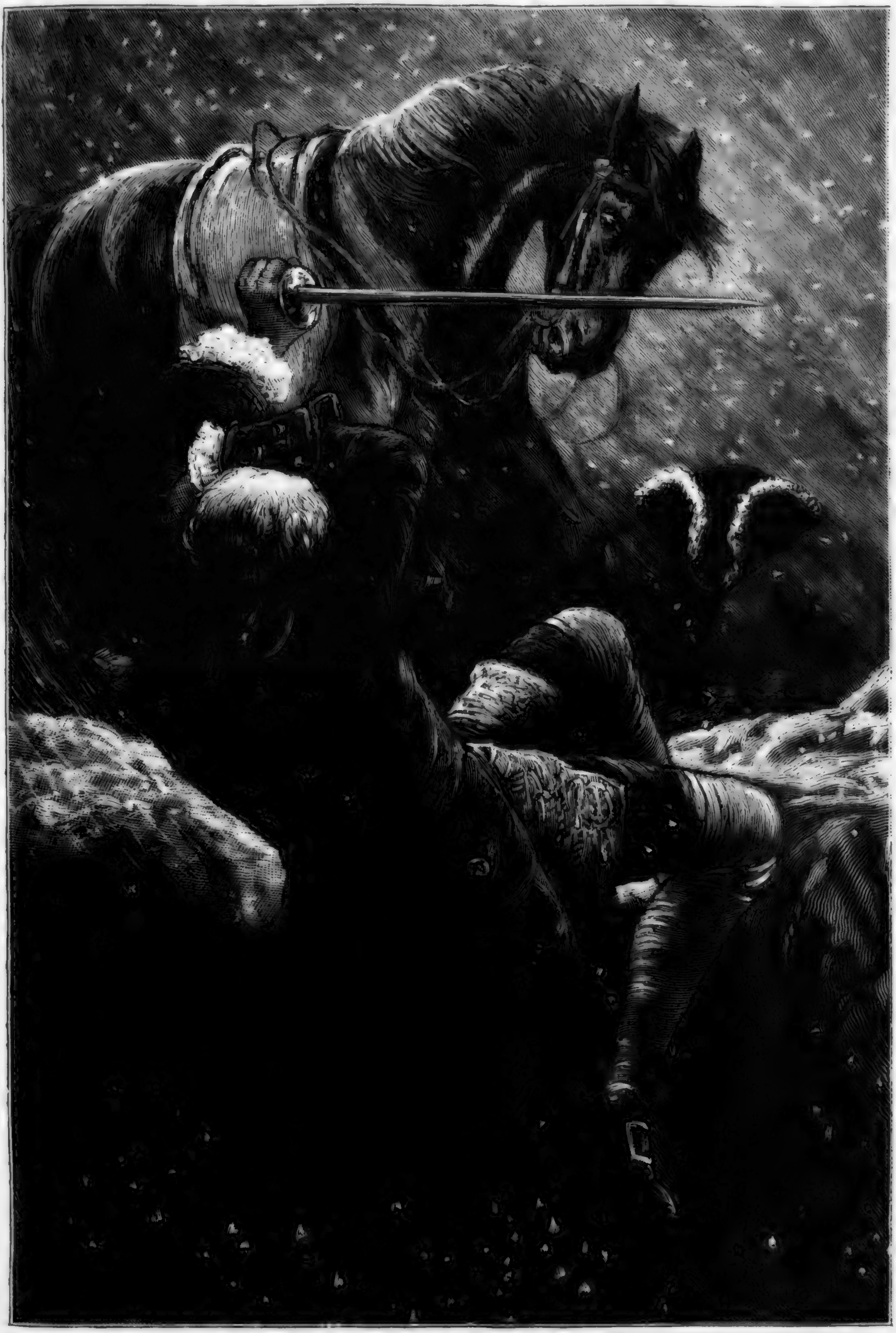
Lentil Soup.
Whole Sheep Roasted, stuffed with Rice and Pistache nuts.
Beans, cooked with cream.
Forcemeat Balls, wrapped in grape-leaves and fried.
Turkey *à la Américain*, cranberry-jelly and pickles.
Lamb Chops, Peas cooked in cream.
Rice Pudding. Apple Pie.
Dates, Figs, Oranges, etc.
Coffee.

The cream referred to was from buffalo milk. My friend spoke particularly of the force meat fried in grape leaves, the latter giving a piquant and relishing flavor. Knives and forks, of course, were dispensed with; but at the end of each course a servant passed round a salver of rose-water and a silver globe containing scented soap. My friend asked the interpreter if the Turkish agent really understood no English, and being answered in the negative, asked what was really considered etiquette. The reply was that the host would take a piece *next* to the best, and then the guest next him would take the best one, and so on; the meat being cut up into dice made this easy.

The host, rising, led the way into an adjoining divan, where coffee was passed round, and presently a troupe of dancing girls wound up the novel dinner. At parting the host gave each one a souvenir. My friend's was a very handsome scarabeus, which a burglar subsequently very considerately left behind while he carried off several hundred dollars' worth of jewelry.

A trip up the Nile has only one drawback for the average tourist—it is decidedly expensive—costing from $1,000 to $2,000 gold.

JEPHTHAH'S DAUGHTER.—BY MOZIER.



A PERILOUS ADVENTURE.—"AT THE SAME INSTANT THE EARTH WENT FROM BENEATH MY FEET, AND I FELL—FELL I KNOW NOT WHITHER, DOWN, DOWN INTO DEEP DARKNESS UNFATHOMABLE."—SEE NEXT PAGE.

MOLLY CAREW.

Och hone! Oh! what shall I do?
Sure my love is all crost, like a bud in the frost;
And there's no use at all
In my going to bed,
For 'tis dhrames and not sleep
That comes into my head.
And 'tis all about you, my sweet Molly Carew,
And indeed 'tis a sin, and a shame
You're complater than nature, in every feature;
The snow can't compare with your forehead so fair;
And I rather would spy just one blink of your eye
Than the purtiest star that shines out of the sky;
Tho' by this and by that! for the matter of that,
You're more distant by far than that same.
Och hone, wierasthrew! I'm alone in this world
without you!
Och hone! but why should I speak
Of your forehead and eyes, when your nose, it defies
Paddy Blake, the schoolmaster, to put it in rhyme!
Tho' there's one Burke, he says, who would call it
*snub*lime:
And then for your cheek, throth 'twould take him a week
Its beauties to tell as he'd rather.
Then your lips, O machree! in their beautiful glow
They a pattern might be for the cherries to grow.
'Twas an apple that tempted our mother, we know;
For apples were scarce, I suppose, long ago;
But at this time o' day, 'pon my conscience, I'll say,
Such cherries might tempt a man's father.
Och hone! wierasthrew! I'm alone in this world without you!
Och hone! By the man of the moon!
You tease me all ways that a woman can plaze;
For you dance twice as high with that thief Pat Maghee
As when you take share in a jig, dear, with me;
Though the piper I bate, for fear the ould chate
Wouldn't play you your favorite tune.
And when you're at Mass my devotion you cruss,
For 'tis thinking of you I am, Molly Carew.
Thin you wear on purpose a bonnet so deep,
That I can't at your sweet pretty face get a peep.
Oh! lave off that bonnet, or else I'll lave on it
The loss of my wandering sowl!
Och hone! like a howl
Day is night, dear, to me, without you!
Och hone! don't provoke me to do it;
For there's girls by the score, that loves me and more,
And you'd look very queer, if some morning you'd meet
My wedding all marching in pride down the street.
Throth you'd open your eyes, and you'd die of surprise
To think 'twasn't you was come to it.
And faith! Kitty Nail, and her cow, I go bail,
Would jump if I'd say, "Kitty Nail, name the day."
And though you're fair and fresh as the blossoms in May,
And she's short and dark, like a cold Winter's day,
Yet if *you* don't repent before Easter, when Lent
Is over, I'll marry for spite.
Och hone! and when I die for you,
'Tis my ghost that you'll see every night.

◆

A PERILOUS ADVENTURE.

By F. E. M. Notley.

Sitting by my fireside, with my young wife by me, she prays me to detail in writing the history of that perilous adventure which befell me just a year since.

I was not married then. I was Florian's lover, though not more her lover than I am now. I was living, as I am at present, at my paternal mansion of Penkivel, only I was a forlorn man, living alone, my heart brooding over a jealous affection, and my mind filled with a blank melancholy.

My mother had died but lately, and there was a great gap in our household—a gap hard to fill, for she was a notable woman, and a loving mother to me. A trifle fond of power, perhaps—a trifle jealous and exacting; but I have a little too much of her blood in me for that matter, so I will not complain that her affection required of me, in return, an exclusive attention and a single heart. I gave both.

Knowing all that she had done for me, I thought it but a small thing that I should remain single for her sake.

Nevertheless, this bachelorhood had somewhat soured me, and at thirty-five I was conscious that I could no longer play my part among younger men, or catch the eye of a maiden, as I had done some eight or ten years ago. And this grieved me, for down in the West there lived a lady whom for three years I had loved secretly and too well. It was for my mother's sake that I spoke not of my love. Looking sorrowfully on her aged face, I could not find it in my heart to embitter her last days by placing another mistress in the old house, where she had reigned queen for more than forty years.

So I held my peace, and bore to see my love surrounded by handsomer and younger suitors than myself—men before whom my claims would seem weak as cobwebs in the eyes of a young maiden. And yet, sometimes, the remembrance of a glance, a blush, a tone, made my heart beat wildly with hope, as in my loneliness I counted these shadows over in my memory.

And now my mother was dead. She died blessing me, seeming at last to understand that, if she had done much for me, I, too, had borne somewhat for her.

"Give yourself a comforter, dear Ralph," she said, eagerly. "Waste no time in grief. Your household needs a mistress. Marry, my son, and may God bless your choice."

Thus I had her blessing on it; and if I could only persuade myself that my suit would prosper, I might speak now.

But my hopes were so low that I dared not. I was no longer young, my face was worn, my hair was sprinkled with silver threads. And this change had come to me through her—for her sake. Oh, that I could make her understand this!

Three years is a long time for a man to stifle love and endure jealousy, doubt, despair. And yet when I looked down on the face of my mother, so beautiful in death, I felt glad that I had borne these things silently and in patience. If Florian might only comprehend that I had suffered, and love me for it! but no, I was too old now to win a woman so young and fair.

Thus ran my thoughts; therefore it was no marvel I was exceeding sad after my mother's funeral, when I sat in my house alone.

It was Christmas Eve, and, because of my grief, there was silence among my servants, and there were no guests in the house, no voice of merriment or of song. It was very chill, very lonely, and I sat alone.

Suddenly the door was opened by a rough hand, and there broke offensively upon my solitude a gay roysterer—a merry blade, men called him—*her* cousin. The man was handsome and young, and had a careless, easy grace, a winning way with him that maddened me. For I knew his soul was not so fair as his face, and it was hard to see him gaining sweet smiles and gracious glances from those who had no means of judging him, save by his outward looks.

"Why, man," he cried, wringing my hand with false friendship, "thou'rt grim and glum, and silent as a drowned cat this Christmas-tide! Come, cheer up! order in the punch-bowl and the claret: grief is dry; and at thy years there is no time for sorrow. Let us laugh and be merry. I vow there are wrinkles on thy brow since last I saw thee, and thy pate grows gray as a bald magpie's."

I answered his rude greeting with few words, but they were cautious, for her sake, and I rang, and ordered Christmas cheer for him. We talked and drank till late into the night. In his cups his talk flowed freely, and his words were bitter to me. He loved his cousin, he said, and he believed her heart was his; he was going to ride next day—Christmas day—to her father's house; he should be in time for dinner; he should stay with them a week—the feasting, merry Christmas week. Had I any message? He would take it with pleasure; or a letter, if I chose.

"I had no letter, no message," I answered, coldly.

Ah, well, I was a dismal man, and he was sorry for me. I had grown lately to look quite an old bachelor, too. Why did I not brush up that grizzled hair of mine, and make love to some staid lady of my own age? There was Miss Penelope Penguin, she was but thirty-four, and not ill-looking; what did I think of her?

I hated her. And I considered his remark offensive.

Oh, well, he begged pardon; he meant no offense. At all events, let us drink to our future brides. He filled his cup to the brim, and, reeling as he stood, drank to the health of the woman I loved.

"Here's to the health of Florian the fair!" he cried, "and may she be my bride before Lammas-tide! Well, sir," he added, with tipsy fierceness, "will you not give a health likewise?"

"I cannot give a better toast, or a fairer lady," I answered. "I drink to Florian also. And may I see her in her shroud rather than wife to such a man as you!" I thundered forth with fury.

Staring at me with stupid amazement in his bleared eyes, he flung the silver flagon across the table wildly, and then fell helpless and drunken on the floor. I rang the bell.

"Put this gentleman to bed," I said, quietly. With that I left the room; I could not endure the sight of his handsome, foolish face, now that he had talked of Florian as his wife.

In the morning I saw by my servant's looks that he was gone. I sat at my breakfast lonely, counting in my heart the miles still stretching between him and her. At dinner-hour he would be there—he would see her face—touch her hand—whisper the words in her ears that I had not dared to say. I thought of the dance, the song, the jest, the fair rooms bright with evergreens and music; and with heavy, jealous eyes, I looked round upon my sombre dwelling, where the pale shadow of my dead still rested.

And this was Christmas Day! Truly a melancholy time for a solitary man, who knows himself uncared for, and whose "way of life has fallen into the sere and yellow leaf."

The next day and the next went by; and on the third there came a letter from him.

"Had he drunk too much on Christmas Eve?" he asked. "He had a confused memory of a fight, in which he certainly came off victorious, being unbruised. However he hoped I would forget and forgive. For his part, he bore no malice, and was sorry for my loneliness and my loss. He had talked of me to his cousin, and she was sorry also, very sorry. And her father had said, 'Would I finish my Christmas with them?' It was doubly hard to be lonely at such a time, and she thought that grief was not so ill to bear when shared; so would I come? I should have a Cornish welcome, and good cheer."

He ended in his rough, wild way, thus:

"Hang it, man, brighten thy long visage, and bestride thine horse, and let the good beast bring thee hither with all speed. Here shalt thou find Winter and fair weather, and a fairer lady, who deems not her cousin, forsooth, good company enough for Christmas."

It was hard to take an invitation from his hand. My pride rebelled against his interference; I would not go. I held to this resolve all that day, and the next till noon; then I read his letter again, and fancied I saw a vexed tone in it—fancied I saw that he had written it perforce against his will. At this my stubborn mood melted.

I hesitated, pondered, then yielded. My weak heart yearned to see her face, and to have that joy, I would bear to behold it beaming smiles on him.

Half-ashamed of my weakness, I lingered till next day—the 30th; and even then it was past noon when I started.

But my horse was good, and if I rode hard, I might be at Trevesy by nightfall. There was a sprinkle of snow on the ground, and a feathery shower fell lightly around me, of which I thought nothing till sunset.

The short, dark day was over at five, and at that hour a sharp wind sprang up, and the snow began falling thickly. I felt somewhat blinded and bewildered by the big flakes, ever flying downward and onward and around me, like a cold, patient army, whose onslaught could never be staid or driven back.

Still I pushed on, though the poor beast I rode shook and trembled, and strove, in his dumb way, to reason against my headstrong will.

And now, with some dismay, I suddenly perceived, by the sinking of my horse, even to his flanks, in heaped snow, that, bewildered by the whiteness, he and I had lost the road.

It was but a rough one at the best, for I was in a wild country, where mines were many and men and dwellings few.

Extricating my poor steed from the drifted snow wherein he floundered, I rested him a moment, and shouted aloud for help. Again and again my cry came back to me, following on the wings of the cold wind, but no other sound broke the deathly stillness of the night.

Oh, for a saving light in some charitable window! But there was none—only snow and darkness, darkness and snow, all around. I thought it terrible; and yet in a little span of time from this I would have deemed it paradise to be lying lonely on the heaped snow upon this drear moor.

Give me thine hand, wife. Methinks I have need of the touch of thy dear lips to give me courage, ere, even in memory, I can dare recall the horror—the hideous horror—of that night. So let me hold thee thus, while my shrinking pen draws the details of my peril.

I put my horse to a sharp canter, and he went about a furlong blindly, then stood still, snorting with terror. I strove to urge him on, but he refused to obey either whip or spur. Seeing no reason for my horse's fright and stubbornness, I spurred him sharply, and urged him with angry words to obedience.

His wonderful obstinacy compelled me at length to dismount, and, with my drawn sword in my hand, prepared for highwayman or footpad, I dragged him onward by the bridle.

Upon this he made a long, hasty plunge forward, then stopped, and at the same instant the earth went from beneath my feet, and I fell—fell I knew not whither, down, down into deep darkness unfathomable, terrible as the great pit.

I can scarcely say whether I thought as I fell, yet I knew I was going to death—knew I was descending one of those unused shafts that lie out on many a Cornish moor—knew that my bones would lie unthought of in its depths for ever.

Surely there are moments in time that count as years, for, as I fell. I saw my whole life pass before me, and old buried actions long forgotten surged up fiery. I saw my mother's face and Florian's. As hers came I closed my eyes.

"Let me die now," I said; and, with a great cry to God for mercy, I gave myself up to death.

But even at that instant my flight was arrested, and I hung in mid-air, clinging by my hands, to what I knew not. It was my sword, which I had forgotten that I held. By a miracle it had thrust itself, as I fell, between the earth and the rocks in the side of the shaft, and there, jammed fast, it held me up.

I cannot explain how this occurred—I only knew that it was so. As that cry for mercy escaped my lips, the mercy came. My sword caught in the interstices of the rock, and I was held up, my feet dangling over the abyss, my hands clinging to the hilt of my blade.

MOLLY CAREW.—SEE POEM ON PAGE 34.

It was firm as a wedge—I could feel that, in spite of my trembling; yet still my position was horrible. To remain thus, to hold on, was torture unutterable; but to yield even for a moment was death.

There was no hope of release for hours—there was no possibility of relief of posture; there was nothing but strong endurance and courage to carry me through. I waited, I suffered, I prayed.

Ah, darling wife, you lean your face on mine, and your tears fall. Looking into your loving eyes, and paying back kiss for kiss, I thank God that I endured, hoped. It was a night to me of fire. The winds blew and the snow fell, but the cold touched me not; I had fallen too deeply into the shaft for that, even if my tortured blood could have felt it.

Morning broke at last, and hope grew with it. At intervals I had called aloud through all the night; but now, with scarcely an intermission, I raised my voice in cry for help.

I did this till weariness stopped me; then I rested in agonized hope of a voice in reply. There was none. No sound reached me. I was in my grave, alone. I called again, again, again! I husbanded my voice. I drew in my breath, and shouted with the strength of despair. There was no answer.

The sun traveled upward, and I knew it was high noon, though to me the stars were visible likewise; yet the midday rays shone somewhat into the shaft, and showed me how I hung.

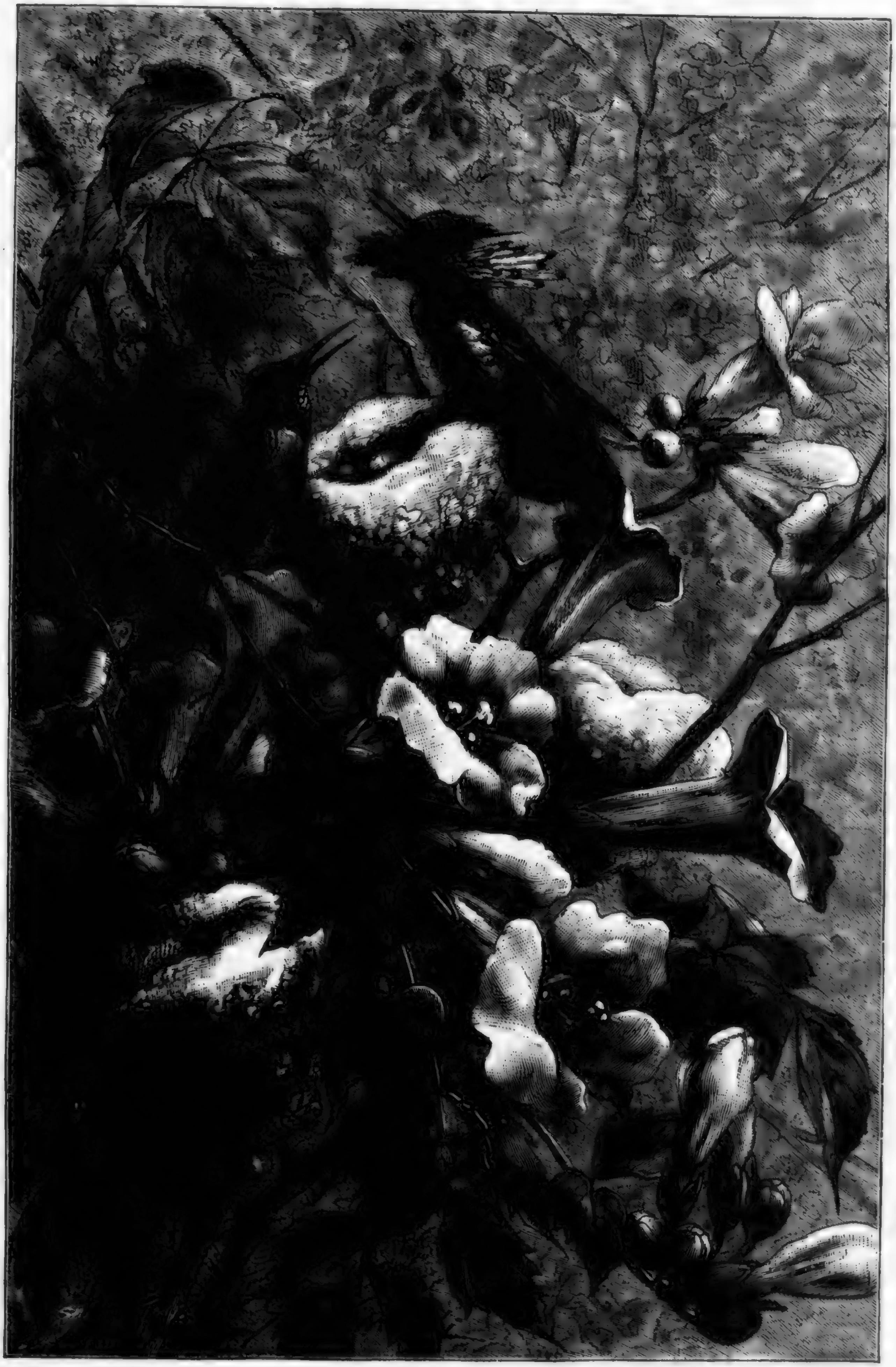
The pit here was not quite perpendicular; it sloped slightly from my feet outward, and I had found rest for one foot on a ledge of rock. Oh, the ease to my anguish from this merciful rest! Tears sprang to my eyes as I thanked God for it.

The sun had shown me that to climb out of the pit unaided was impossible, so I called for help again, and called till voice failed me. I ceased to cry, and night fell down again. As the hours crept on, a kind of madness seized me. Phantoms sprang up from the pit, and tempted me to plunge below—horrible eyes glared down on me, and voices mocked me.

But worst of all was the sound of water—a purling rill flowing gently in my very ears, trickling drop by drop in sweetest music, horribly distinct.

Water! To reach water I would willingly die; but I knew it was a madness, so I resisted the fiery thirst that would have made me release my hold and perish. Water! Yes, there was water at the bottom of the shaft, fathoms deep below my feet, but I could only reach that to die; and there was water on the fair earth, fathoms above me—water I should never see again.

I grew dizzy—sick—blind. I should have fainted—have fallen—died; but as I leant my head against the



THE SPLENDID COQUETTE HUMMING-BIRD OF BRAZIL.—SEE PAGE 39.

rock, I felt as though a refreshing hand were laid upon it suddenly.

It was water! It was no madness—it *was* water! A tiny stream trickling through the bare wall of rock, like dew from heaven. I held forth my parched tongue and caught the drops as they fell; and as I drank my strength was renewed, and hope and the desire for life grew warm within me again.

And yet on this the second night of my horrible imprisonment I cared not so passionately, I looked not so eagerly, for succor. My limbs were numbed, my brain deadened; life was ebbing toward death. A shadow at times fell over my eyes, and if I held still to the hilt of my sword; if my feet sought still the ledge that rested them, they did it mechanically, from habit and not from hope.

I think sometimes I was not in my right mind. I was among green fields and woods. I was gathering flowers, I was climbing mountains; and from these visions I awoke always to darkness—darkness above, around; darkness below, hiding the abyss that hungered greedily for my life. And no friendly face, no voice, no footfall near. Not a step through all these slow, slow hours. If passing peasant, through the day, had heard the lonely cry rising from the depths, he had set it down to ghost or pixy, and had passed on his frightened way regardless.

And now the night was wearing on, and no rescue. I could not live till morning—I knew that.

Well, I would die with a prayer for mercy on my lips, and the thought of Florian hidden in my heart. She would marry soon, and if she had ever guessed my long, long love, she would smile on it then as an old tale, and forget it. He was a hair-brained fellow—witless, wild, not wicked. No, not if I were dying, would I let jealousy blind me. I would do him justice.

My mind wandered again. My mother waited for me; I must hurry home; but I was bound by a chain, in outer darkness, and I was going to die.

There was no Christian in all the land to succor me—I was forgotten and forsaken, left in the pit—and I would unclasp my hands, and fall and die.

No, I would call again once more.

"Help! help! Mercy! help!"

As my fainting voice died in the dark depth, and quivered up to the glimmering sky, I felt hope die with it, and I gave up all thought of life. I turned my eyes toward my grave below, and murmured, with parched lips:

"Out of the depths have I cried unto Thee, O Lord!"

The little rill that hitherto saved my life trickled on, and its silvery murmur, as it dropped on the rock beneath, was the sole sound that broke the deathly silence around me.

My prayer was over, and I had not relinquished my hold. I was stronger than I had deemed myself; I would cry out again:

"Help! help! help!"

I stopped. I listened. A sound was floating on the wind. Coming, going, joining the drip, drip, drip of the rill—then dying, then returning. Listening with my whole being, I recognized the sound.

Bells—church-bells—chimes ringing in the New Year!

"Oh, God, have mercy on me! have mercy on me!"

Bells ringing in the New Year—bells chiming in the ears of friends, telling of gladness and of hope—bells clashing in at merry intervals, between music and laughter, loving greetings, kisses and joy.

Will no one in my Father's house take pity on me? Am I missed nowhere? The bells chime for feasting and gladness; and I am here, hanging between life and death. The jaws of the grave are beneath me, my joints are broken—and the bells chime on. Would it not be a good deed on this New Year's Day to save me! Oh, feasters and revelers, hear me!

"Help! help! It is Christmas-time! Help, for Christ's sake, good people!"

The bells float nearer, and drown the drip of the trickling water, and I cry, "Help, help!" saying, "Now will I call till I die." A film grows over my eyes, but my voice is strong and desperate, as I shout, "Christmas-tide! For Christ's sake, help, good Christians!"

A great light—a flash as of fire! For a moment I deem it death; then, gazing upward, I see, amid a glare of torches, faces—oh, they were angels to me!—eager faces, peering downward. And close by me swings a torch, let down into the depths; its light falls on my haggard face—a great shout rends the night-sky.

"He is here!—he is safe!—he lives!"

I cannot speak, though my lips move, and my heart stands still as I see one, two, three daring men swing themselves over the abyss—miners, used to danger—and in a moment stout arms are around me, and I am borne upward, carried gently as a child, placed an instant on my feet, and then laid down tenderly on the heath.

I am so weary and faint and worn, that I lie with closed eyes, never striving to say a word of thanks.

"Go not so near the brink, madam, I entreat!" I hear a voice cry, sharply.

Then I open my aching lids, and between me and the shaft there kneels a white figure—between me and the sky there bends a white face, and tears, fast and warm, fall down upon my brow.

It was Florian. But even when she stole her little hand into mine—mine so cramped and numbed that it gave no response to her tenderness—and even when she stooped and pressed her lips upon my cheek, I could not breathe a word to thank her.

Yet Florian, dear wife, let me tell thee now that from the depths of my happy heart there rose a hymn of joy, and I understood from that moment that thou wert mine and I owed my life to thy love.

Then thy sweet lips breathed words that fell upon my soul like manna—words of tenderness and pity that made the torture of those slow hours in the pit fade away, so mighty did this reward seem for my sufferings.

I was carried to Trevesy; and as the men bore me along, you walking by my side, I heard them tell the tale of my servants' fright when my horse returned home alone, and how they came to your father for tidings of me. Then they whispered of the painful search through the day and night, the tracking of my horse's hoofs upon the snow, and the story of the scared peasant, who all night long had heard the cry of tortured ghosts issuing from the earth.

And this story seized upon my Florian's heart with deadly fear, and, turning back upon the black moor, she tracked the hoof-marks till they stopped upon the brink of the old, forgotten shaft—the shaft of the worked-out mine—well-named the Great Wheal Mercy.

There was I found and saved by her I had loved so long. And, dearest, as I slowly came back to life on that New Year's morning, and faintly whispered to you of my long love, my patient silence, my pent-up sorrow, you, in your great pity, thinking of my sufferings in the shaft, poured out all your maiden heart; and your loving words, my Florian, were sweeter to me than even the trickling spring had been in Great Wheal Mercy.

Because of my silence, my patient waiting, my tender thought for my mother, you loved me better, you said. So, in a month you were my wife, and this Christmastide I sit by a happy hearth; and, looking down on the bright faces of wife and child, I thank God for that crowning mercy—thy love, dear one—which saved me on New Year's Day from a dreadful death.

Hark! dearest, the bells ring out for another year as I write; they chime their welcome from every steeple in the land, awakening us to fresh hopes and labors.

Sweetest wife, the year is done and another round of time is born to "crown the earth with mercies."

HUMMING-BIRDS, OR TROCHILIDÆ.

> "Bright humming-birds of gem-like plumeletage,
> By Western Indians 'Living-Sunbeam' named."
> —Bailey, *Mystic.*

The wonderful little humming-birds are only found in America and the adjacent islands, where they take the place of the sun-birds of the Old World.

These little winged gems are most capricious in their choice of locality, some being spread over a vast range of country, while others are confined within the limit of a narrow belt of earth scarcely more than a few hundred yards in width, and some refuse to roam beyond the narrow precincts of a single mountain. Some of these birds are furnished with comparatively short and feeble wings, and, in consequence, are obliged to remain in the same land throughout the year, while others are strong of flight, and migrate over numerous tracts of country. They gather most thickly in Mexico and about the equator, the number of species diminishing rapidly as they recede from the equatorial line.

The name of "Humming-birds" is given to them on account of the humming or buzzing sound which they produce with their wings, especially while they are hovering in their curious fashion over a tempting blossom, and feeding on its contents while suspended in air. This name is so appropriate that it holds good in other languages, and expressive titles have been given to these birds which are either descriptive of the sound or an endeavor to imitate it.

The number of species of these birds is truly wonderful, as more than three hundred are known and have been described, while new species are being continually discovered. It is evident to any one who has examined these exquisite little birds, and studied the inexhaustible variety of form and color which they exhibit, that many forms are yet wanting as links needed to complete the chain of species, and that in all probability there are in existence humming-birds which possess forms quite as strange and colors quite as glowing as any of those which have found a place in our collections.

The legs of these birds are remarkably weak and delicate, and the wings are proportionately strong, a combination which shows that the creatures are intended to pass more of their time in the air than on foot. Even when feeding they very seldom trouble themselves to perch, but suspend themselves in the air before the flower on which they desire to operate, and with their long, slender tongues are able to feed at ease without alighting. In the skeleton, especially in the shape of the breast-bones and wings, as well as in the comparatively small size of the feet, the humming-birds bear some analogy to the swifts, and, like those birds, never lay more than two eggs.

The flight of these birds is inconceivably rapid, so rapid, indeed, that the eye cannot follow it when the bird puts forth its full speed; and with such wonderful rapidity do the little, sharp-cut wings beat the air, that their form is quite lost, and while the bird is hovering near a single spot, the wings look like two filmy, gray fans attached to the sides. While darting from one flower to another the bird can scarcely be seen at all, and it seems to come suddenly into existence at some spot, and as suddenly to vanish from sight. Some humming-birds are fond of towering to a great height in the air, and descending from thence to their nests or to feed, while others keep near the ground, and are seldom seen at an elevation of many yards.

The food of the humming-birds is much the same as that of the honeysuckers, except, perhaps, that they consume more honey and fewer flies. Still, they are extremely fond of small insects, and if kept away from this kind of diet soon pine away, in spite of unlimited supplies of syrup and other sweet food.

The splendid coquette is one of the rare species of this beautiful genus.

It seems to be entirely a continental bird, not being found in any of the West Indian Islands, and its principal residence seems to be in Northern Brazil and along the course of the Amazon as far as Peru. It may be readily known from the other species of coquettes by the colors of its head, crest and neck-plume. The crest and top of the head are a rich, ruddy chestnut, and the upper surface of the body is bronze-green, excepting the wings, which are purple-black, and a broad band of white which crosses the lower part of the back. From the white band to the insertion of the tail is bright chestnut. The tail is also chestnut, except the two central feathers, which are green at the latter half of their length. The forehead and throat are emerald-green, and the neck-plumes are snowy white, tipped with resplendent metallic-green.

The female has no crest nor neck-plumes, and the band of white across the back is very narrow. The total length of the bird is about two inches and a half.

Signature of the Cross.—The mark which persons who are unable to write are required to make, instead of their signature, is in the form of a cross (X), and this practice having formerly been followed by kings and nobles, is constantly referred to as an instance of the deplorable ignorance of ancient times. Anciently, the use of this mark was not confined to illiterate persons; for, amongst the Saxons, the mark of the cross, as the attestation of the good faith of the person signing, was required to be attached to the signature of those who could write, as well as to stand in the place of the signature of those who could not write. The ancient use of the cross was, therefore, universal alike by those who could, and those who could not, write. It was, indeed, the symbol of an oath from its holy associations, and generally *the mark.*

The current spelling of the word *avoirdupois* is etymologically wrong. Professor Skeat translates it "to have some weight"; but *avoir* is here a substantive and not a verb. It is found in Old English as *aver*, signifying "goods," *e.g.*—"Unryghtfull occupyenge of ony aver in this worlde is called theeft." (1496.) "*Averdepois,*" as it used to be spelled, therefore meant, "goods of weight," *i.e.*, merchandise sold by weight. "*Avoirdepois*" is not so correct, but "*avoirdupois*" is absolutely wrong, the "*du*" having been introduced about 1650, as Dr. Murray says, "by some ignorant improver."

OLD WELLS.

By Walter Edgar McCann.

So much alarming literature has appeared of late, particularly in the medical magazines, on the subject of the drinking-water of cities, that nervous people are beginning to wonder whether it would not be just as well to die of thirst as of some of the malignant and dreadful diseases that are said to issue from the hydrants and kitchen pipes. That the fear of the water is not ill-grounded is well established. It used to be said, in the scientific discussions, that from the encroachment northward of the so-called malarial line, it was plain that radical changes were going on in the American climate. Every year it was seen that the fevers peculiar to the South were extending to places that never knew them. Thousands were succumbing to mysterious diseases, which were described comprehensively as typho-malaria. Indeed, the word malaria became, and remains, a sort of grim jest, and many practitioners have grown so sensitive on the subject that they avoid using it.

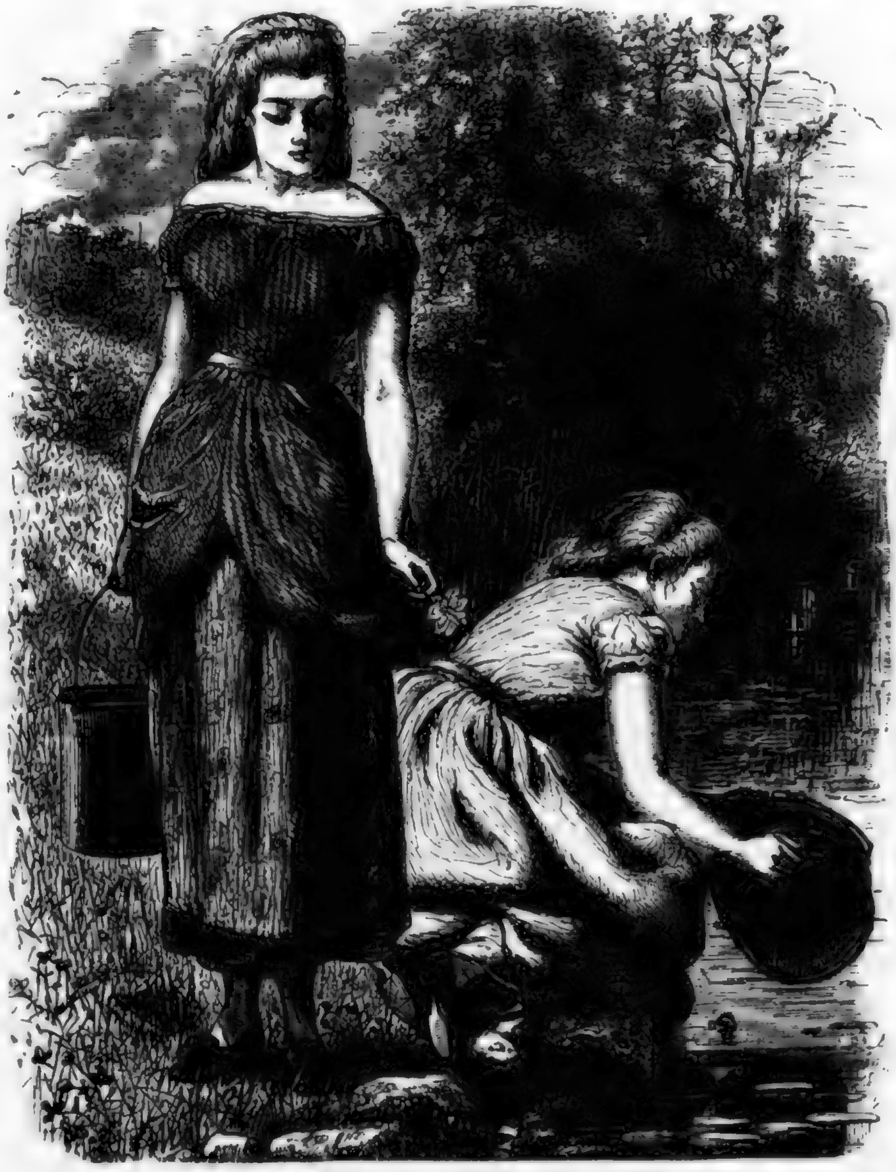
"THE BOY . . . EXTENDS HIMSELF ON HIS HANDS AND KNEES AND LAPS IT."

The pollution of the drinking-water of towns and cities would probably explain—as, indeed, the physicians now admit—the extension of the malarial line better than any other theory. The long and baffling epidemic at Plymouth, Pa., in the Winter of 1884-85, and which extended to other villages drawing their supplies from the same source, shows the extent to which this evil may reach. In truth, it may be questioned whether any city in the country has a pure water supply. Shocking revelations have been made concerning that of Philadelphia, but no worse than those published in August, 1885, about Boston. From almost every direction stories have come of rivers and streams befouled by tanneries, manufacturing establishments, and the like, and, as in the case of the Cochituate in Massachusetts, of pollution of even a much worse kind.

One scarcely knows what to drink. There are the table-waters which are brought from the various health springs abroad, such as Apollinaris; and others which have an origin at home, such as the Deep Rock; but both are expensive, and a taste for them has, with the majority of people, to be cultivated. It is doubtful, too, whether their habitual use is not injurious. They are sometimes irritating and sometimes the reverse of beneficial to the digestion, and many physicians have set their countenances against them.

There are sanitary authorities who recommend as nearly as possible no drinking at all. If good water could be had no harm would be likely to follow, but, as this is not the case, it is best, according to these instructors, to dispense with this manner of quenching the thirst altogether. In place of water they recommend the free use of fruits and vegetables which contain moisture sufficient for the ordinary needs of the body. There is a luscious refreshment undoubtedly in peaches, pears and berries, but still, on a hot Summer day, after a walk, these would scarcely be found an efficient substitute for the "draught from the crystal brook" or ice-pitcher. Old Montague seems to think thirst mostly a cultivated appetite, and he reminds us of the story of Aristotle relating to Andron, the Argian, who traveled over the arid sands of Libya without drinking. He continues further: "A gentleman who has very well behaved himself in several employments, said, in a place where I was, that he had rid from Madrid to Lisbon, in the heat of Summer, without any drink at all. He is very healthful and vigorous for his age, and hath nothing extraordinary in the usance of his life but this: to live sometimes two or three months—nay, a whole year—without drinking. He is sometimes athirst, but he lets it pass over, and holds that it is an appetite which easily goes off of itself, and drinks more out of humor than either for need or pleasure."

The author also recommends the eating of fruit, particularly after meals, and a strong dependence upon it in lieu of wine; but how about seasons of cholera, when fruit of all sorts is so dangerous? Tea and coffee are out of the question as means to quench thirst, for does not Dr. Alcott show that perseverance in the use of either is deliberate—quite deliberate, not to say leisurely—suicide; but in effect true self-slaughter? Of spirits and beer, of course, not a word is to be said.



"THE ONLY PLACE TO FIND PURE AND REFRESHING WATER IS IN THE COUNTRY."

After all, the only place to find pure and refreshing water is in the country. Notwithstanding the revelations of the medical pamphlets regarding sewage, cesspools and the general defilement of everything, there is still in many a pleasant nook as sweet water as people ever drank. A firm belief exists, however, in almost every bosom, that the water of boyhood was the best, the coolest, the clearest and the most refreshing. Who does not remember the hidden springs of his youth? Generally it was a sort of personal property, like a favorite footpath or spot for fishing down by the side of the river. The right kind of a spring is always in a snug nook in the shadow of trees or undergrowth, and the wilder the better. There must be some rocks and boulders about, brightly dappled with the patches of sunshine stealing through the leaves and branches overhead. On the hottest day here it will be cool, and even in the most languid noon something of a breeze blowing. The most charming hour to come upon such a spot is the afternoon, after a dusty and fatiguing walk, to stoop from the rock and take up in one of those pocket-collapsing cups, or anything else handy, a sparkling draught. There is nothing more curious than the indifference of even very fastidious people about water from a spring, particularly when they happen to be thirsty. A suspicious black speck in a glass of hydrant-water would create such a prejudice that an exchange for a fresh potion would be necessary; but no one minds a bug or two, or even the lively presence of a small "varmint" in a cup of liquid light from a country spring. The intruders are fished out and thrown away, and the drink thought none the worse. Almost anything will do to drink from in an emergency—the crown of the hat, if nothing else serves—and the boy, who is rarely particular if in haste or very dry, extends himself on his hands and knees and laps it, like his friend, the dog.

The birds alight, too, and quaff it in their tiny bills, and it is curious to note their light footprints in the sand. Indeed, a lazy philosopher may spend half a day or more in warm weather sitting in the neighborhood of a shady spring and studying the signs and tokens about. We need not be much of a naturalist to discover abundant material for reflection, to say nothing of the instruction available. The water itself is worth careful attention, and the way it comes up out of the ground, and particularly the life that resorts there. There are people who pretend to be connoisseurs about spring water, and to be able to distinguish each particular kind after the manner of experts in wines. The true spring water, non-medicinal, should, of course, have neither taste, color nor smell.

It is surprising how little the poets have had to say about either springs or wells, or, indeed, water at all, as a beverage. They do not seem to have valued it for drinking purposes, the references being chiefly to bathing. The delights of wine and ale they never fail to praise, even those who are known to have been temperate men. Where is there a more pathetic and charming rural picture than the "Deserted Village"? Goldsmith was a walker and fond of the country, and should have remembered the delights of a cool and healthful drink from nature's supply. Everything is told about Auburn, however, except where the inhabitants resorted for this great comfort. There is, indeed, a single glimpse, but only in order that a human interest may be introduced. He describes the solitary widow who feebly bends beside the splashing spring:

"Forced in age for bread,
To strip the brook with mantling cresses spread."

Nevertheless, we find that he does not forget an elaborate picture of the tavern:

"Near yonder thorn that lifts its head on high,
Where once the sign-post caught the passing eye,
Low lies the house where nut-brown draughts inspired;
Where gray-beard mirth and smiling toil retired;
Where village statesmen talked with looks profound,
And news much older than the ale went round."

The wayfarer then, however, who stopped anywhere on his march and asked refreshment of his thirst, expected the "nut-brown draught," and would have resented the proffer of such a barbarous article as cold water.

West, who was certainly not much of a poet, although Dr. Johnson has in a way immortalized him by including him in his edition of English songsters, does, indeed, in his monotonous verses, say that "water claims the highest praise" as "chief of nature's works divine."

Dr. Akenside, as a physician, naturally took a professional view of spring water, and in his eyes it is only worth seeking for its medicinal qualities. He hails the Naiads who "guard the mysterious shrine" for a prescription. Often when everything else has been tried in vain, the invalid "with nerveless arm" and "sick appetite"—

"To your deep mansions he descends,
Your gates of humid rock, your dim arcades
He entereth; where impurpled veins of ore
Gleam on the roof; where through the rigid mine
Your trickling rills insinuate. There the god
From your indulgent herds the streaming bowl
Wafts to his pale-eyed suppliants, wafts the seeds
Metallic, and the elemental salts
Wash'd from the pregnant globe. They drink, and soon
Flies pain, flies inauspicious care."

This, it must be said, is not only very like prose, but exceedingly prosy.

Evidently these poets had no real feeling for the little babbling rills. Sir Richard Blackmore takes a scientific view. He exclaims:

"Tell by what paths, what subterranean ways,
Back to the fountain's head the sea conveys
The refluent rivers, and the land repays.
Tell what superior, what controlling cause
Makes water, in contempt of nature's laws,
Climb up and gain th' aspiring mountain's height,
Swift and forgetful of their native weight."

He says it must be by "happy works and engines underground," and "instruments of curious art."

Even the typical poets of nature and rural life, such as Thompson, Cowper and Bloomfield, ignore water in its homely and placid aspect. Thomson, in the hot noon of Summer, seeks "yonder grove of wildest, largest growth," but it is to extend himself and meditate beside the "raging torrent." And Bloomfield:

"Now noon gone by, and four declining hours,
The weary limbs relax their boasted powers;
Thirst rages strong, the fainting spirits fail,
And ask the sovereign cordial, home-brewed ale."

No one asks or thinks of water; nor does the investigator who seeks for some tribute to it among the more modern poets, except Woodworth, of "Old Oaken Bucket" memory, fare better in his quest.

The spring has a wild beauty, but little of the domestic interest that attaches to a well. Nowadays many farm-houses have a pump at the kitchen-door; but, although more convenient to operate, it is really an ugly contrivance. For a suburban residence it might do, but for what Mr. Burroughs calls "the real country" it is altogether out of place. No possible sentimental association can be entwined about it; we think rather of the libelous stories of the farmer and his adulterations of the milk. The primitive but picturesque well is the appropriate thing for the old homestead, and there are few without one. Nowadays it is often operated by an ingenious windmill arrangement, so that if there is the least wind stirring the bucket is kept full, and there is no time lost; but the quaintest device is the simple and old one of the bucket at one end of the rope and a weight at the other. Now and then, in the hands of the awkward stranger, the rope gets off the pulley, and trouble follows. The windlass, with its iron handle, is more labor-saving, but not so picturesque, and in no degree so old, as the other was used in the earliest times in Egypt.

At most old farm-houses a gourd is the favorite drinking vessel; and in the South, if not elsewhere, there is a fixed belief that water drank from this is sweeter, cooler, and even more wholesome. But well-water is undeniably delicious in any sort of utensil, and even in the modern goblet, sparkling at the brim and the cloudy dew on the outside, on a broiling Summer day, the sight alone is a refreshment. The thirst is quenched far more effectually than by the coldest of ice-water, for in the case of the latter the discomfort soon returns, while with a draught or two from the well the satisfaction is lasting. About the question of wholesomeness there can be not the least controversy.

There are various pleasant proverbs about wells, showing something of the character they have always held in the popular mind. Chaucer's phrase: "The well of English undefiled," has now passed into a sort of proverb, indicating a test of the purity of the language. *Mercutio's* wound, in Shakespeare, was "not so deep as a well nor so wide as a church-door," but it was sufficient. It is at the bottom of the well that truth is found, and the pitcher that goes too often to the well is sure to be broken in the end. A little reflection will recall a great deal of homely wisdom embalmed in similar phrases.

Occasionally the homestead well gets out of order, and then there is vexation and discomfort in the household. Indeed, it may be questioned whether there is any domestic accident capable of creating more inconvenience, trouble and irritation of temper, because, as a general thing, water in the country is scarce, and when the home supply fails it is often required to go a long distance for this absolutely necessary article, and sometimes to trespass on the kindness of a neighbor. In a time of drought, when the wells and springs dry up, everybody one meets is in a bad humor. The well may fail for other causes, and sometimes inexplicably. The "happy works and engines underground," of which Sir Richard Bleekman speaks, get out of order in some mysterious way, and the supply runs short, or the bucket comes up half-filled with sand. Then some one—usually a child—has to descend and investigate. Once, in a great emergency, at a certain farmhouse, a young lady clad in a sort of ballet-dress was lowered to see into a difficulty of this kind, there being no male members of the family about. The experiment required courage, and would not have been undertaken but for the stress of circumstances. But it was a kind of frolic also, and there was much laughter, as well as trepidition, as she went down. Just as she had safely reached the unknown depths, the village clergyman—a Catholic priest—made his appearance to pay a family call. The dramatic character of the scene—his astonishment and perplexity at the excitement around the mouth of the well, and the horror of the folks he had surprised, their uncertainty whether to run and leave their companion to her fate, and her terrified exclamations from within, discerning that something had happened—may, perhaps, be imagined.

The last war in Egypt brought out much about the wells there, and of their importance to that country. The topographical connection is particularly notable, all distances being measured and resting-places established according to the location of the water supply. In a land of such intense heat water is even of more importance than food, since the possibility of dying from thirst is much greater than that of perishing for want of food. It will be remembered how all the maps showing the scene of conflict, and the probable line of the British advance, were dotted with the positions of the wells, with their curious and sometimes pretty names. Latterly, the British in their retreat filled up some of these wells, which, notwithstanding everything is considered fair in war, seems yet a cruel measure. Poisoning them appears scarcely worse—a species of warfare and revenge not seldom resorted to in the past in some countries, although now humanity would not tolerate it. Napoleon Bonaparte, however, who was accused of everything in his time, is said to have adopted this horrible device in certain of his campaigns.

The importance of water in the East, and consequently of the wells, from the earliest times, is shown in the Bible, where we read, in Judges i. 15, that when Caleb gave his daughter, Achsah, to Othniel as his wife and asked her what she desired, she said: "Give me a blessing; for thou has given me a south land; give me also springs of water. And Caleb gave her the upper springs and the nether springs." The family supply of water was property of the greatest value and highest importance, and disputes arose concerning it. In Genesis it is related that Abraham reproved Abimelech because of a well of water which the latter's servants had violently taken away, and, by way of compensation, Abraham took sheep and oxen and gave them to Abimelech. Seven ewe lambs were set apart as the token of a covenant, and Abraham said: "For these seven ewe lambs shalt thou take of my hand, that they may be a witness unto me that I have digged this well." It is added that the place was thence called Beer-shee-ba, "because there they sware both of them." This gives a quaint and vivid picture of the significance of water-rights in those days.

To own a well was—like the possession of a house and lot now—a mark of independence, as we see, in Proverbs: "Drink waters out of thine own cistern, and running waters out of thine own well." The rights of others in this particular were regarded, and trespass and invasion discountenanced.

In Numbers we find:

> "Let us pass, I pray thee, through thy country; we will not pass through the fields or through the vineyards, neither will we drink of the water of the wells."
>
> "And the children of Israel said unto him, We will go by the highway; and if I and my cattle drink of the water, then I will pay for it."
>
> "Let me pass through thy land; we will not drink of the waters of the well, but we will go along by the King's highway until we be past thy borders."

One of the prettiest pictures in the Old Testament, often portrayed since upon canvas, is the meeting of Isaac and Rebecca at the well, related in the Twenty-fourth Chapter of Genesis:

> "And it came to pass, before he had done speaking, that, behold, Rebecca came out, with her pitcher upon her shoulder. And the damsel was very fair to look upon, a virgin; and she went down to the well and filled her pitcher and came up.
>
> "And the servant ran to meet her, and said, Let me, I pray thee, drink a little water of thy pitcher. And she said, Drink, my lord: and she hasted, and let down her pitcher upon her hand, and gave him drink.
>
> "And when she had done giving him drink, she said, I will draw water for thy camels also, until they have done drinking. And she hasted, and emptied her pitcher into the trough, and ran again unto the water and drew for all his camels."

What is described as Rebecca's well is still shown to travelers. To this day, the women in the East are the water-carriers, and the wells in Palestine are usually excavated from the solid limestone rock, with a stairway cut for descent. Rebecca, it will be observed, "went down to the well." The water was drawn up with a rope and bucket, or water-skin. There was also the Persian wheel, with various modifications, comprising a vertical wheel furnished with an equipment of buckets or earthen jars, attached to a cord passing over the wheel, which descend empty and return full with each revolution.

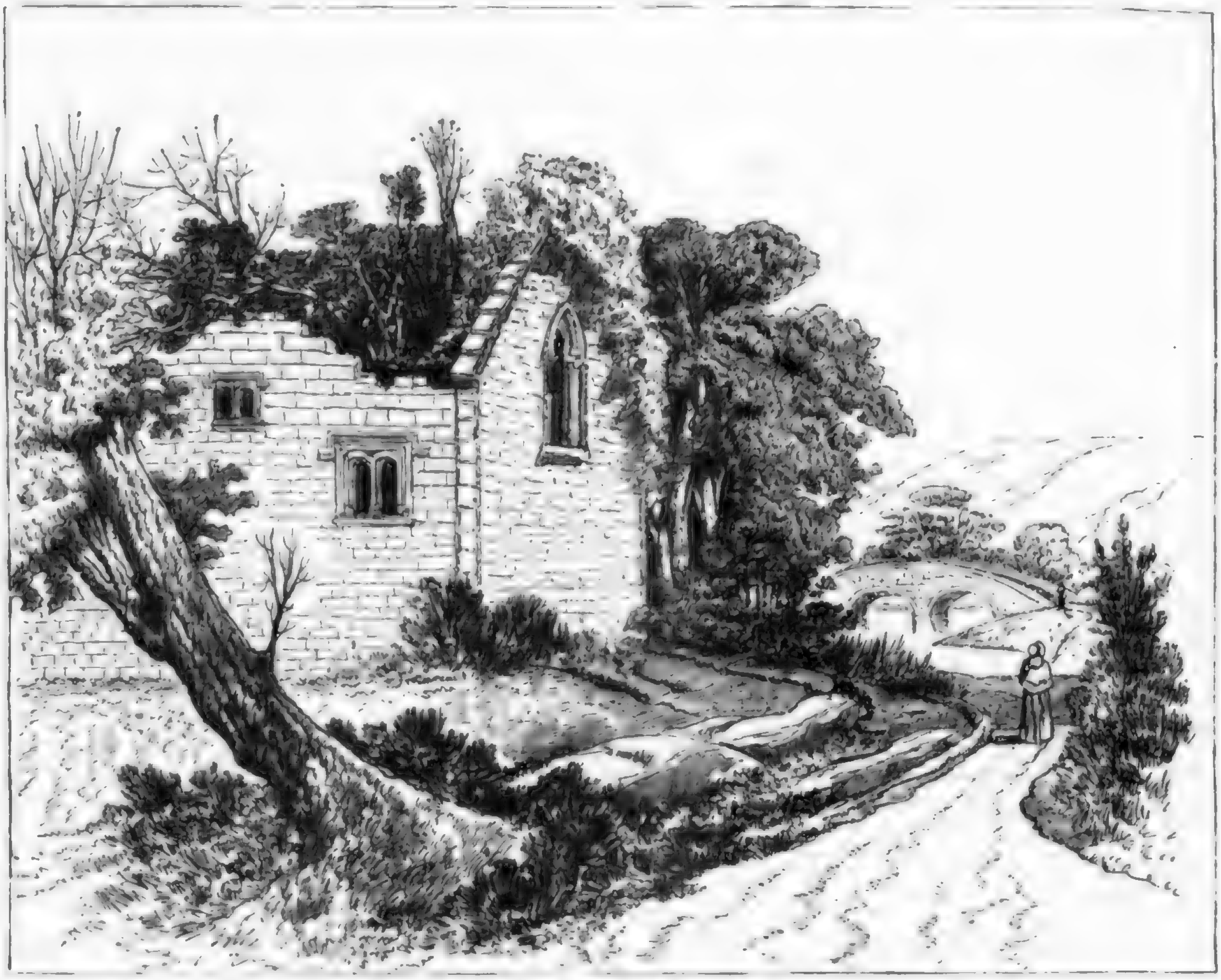
The mouth of the well was furnished with a curb or low wall of stone. It was on this at Jacob's Well that Jesus sat when he conversed with the woman of Samaria, as related by St. John. There was also a stone cover, as is described in the passage in Samuel, where Ahimaaz and Jonathan conceal themselves in the well, and the woman, putting on the lid, scatters corn over it and deceives the pursuers.

Joseph's Well is still to be seen on Citadel Hill, near Cairo. It is in reality two wells, one below the other, and the lower is 260 feet deep. A winding staircase leads to the bottom. Horses and oxen are used to turn the machinery which raises the water, and, on account of the narrowness of the staircase, they are taken down when small and have to remain there.

Perhaps to the Scriptural associations is due the sort of sacredness which attaches to wells in general. In many countries, but particularly in England, this may be in a great measure owing to the singular and, in some cases, very pretty traditions relating to the holy wells. These are very numerous, although many are closed over and not even the sites to be found. Some are shrines, and, in addition to the local feeling of respect, occasionally inspire the wandering tourist in search of the picturesque or unique to a pilgrimage of reverence. Not a few books of stage-coach and pedestrian travel describe these consecrated and truly interesting places.

One of the most noted is the Well of St. Winifred, at Holywell, in Flintshire, which discharges 2,400 gallons a minute, and is the most copious spring in England. The water, in its short course of about a mile to the sea, is used to propel all the mills along which it passes.

Who has not heard the legend and read the pitiful ballad, to be found in the Percy and other collections, of "Fair Rosamond"? In all history there are few more touching stories, although it must be granted that imagination, as regards the popular version, has dealt rather freely with some of the facts. No traveler of true feeling comes to Oxford without making a visitation to the site of Godstowe Nunnery. Certain of the ruins are still standing, which with the boundary wall, which is of considerable extent, are hung with ivy and inclose an orchard and ground attached to farming-sheds at the lower end. Travelers describe the wall as high, and at one corner, where there is a rivulet, and upon the side nearest the river, there is a considerable gable of old structure, probably of the fifteenth century. There is remaining a perpendicular window of three lights, having an obtusely pointed arch, and there are two square-headed and two round-headed windows in the side wall. We give this description because the spot is considered one of the most interesting in England. Fair Rosamond's history, in brief, is this: Eleanor, the daughter and heiress of William, Duke of Guienne and Count of Poictou, was repudiated for her lightness of conduct by her husband, Louis VII., King of France, after his return from the Holy Land, whither she had accompanied him. With her divorce her dowry was restored to her—a very wealthy one of gold and rich provinces. Henry II., then Count of Anjou, and in his nineteenth year, lured by her fortune, made successful suit to her and married her six weeks after her separation from her first husband. Henry, the victim of an unequal mate, felt the jealous nature of her vigilant thrall, and as the mother of his children took part in their contentions with the sire, he hated her; so much so, that, in attempting to escape over to them entirely, in male attire for a disguise, she was captured and confined in



ROSAMOND'S WELL AT GODSTOWE.

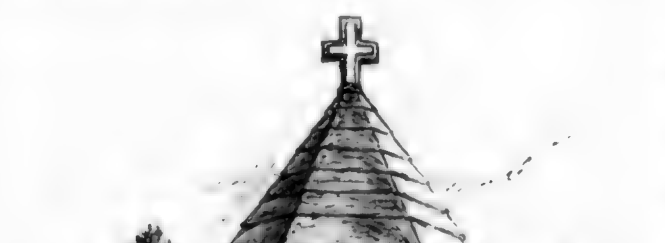
hard quarters until the death of Henry, in 1189. He, in his lifetime, had attached himself fervently to a paragon of beauty, Rosamond, the daughter of Walter, Lord Clifford.

She was a lovely girl, in the flower of her youth, when Henry took her under his protection and secreted her in the famous labyrinth of Woodstock in a series of wonderfully contrived chambers. The entrance was known only to a few. It was a succession of arches and walls of brick and stone. Here, according to the legend, deprived almost of heaven's light, absent from her lover and tormented in various ways by Queen Eleanor, she died. One version relates that she was poisoned, but the truth seems to be that she fell a victim to consumption; not in the labyrinth, but in the nunnery of Godstowe. An old author declares that the nuns loved her fondly, and that she was "a masterpiece of nature; the complete beauty of the age." She was buried under the great altar in the chapel, but afterward was removed. Leland says in his "Itinerary," *temp.*, Henry VIII.: "Rosamunde's tombe at Godstowe was taken up o' late; it is a stone with this inscription: 'Tumba Rosamundæ.' Her bones were inclosed in lede; withyn that the bones were closed in leather; when it was opened there was a very sweet smell came out of it." The grave was then despoiled and the bones scattered.

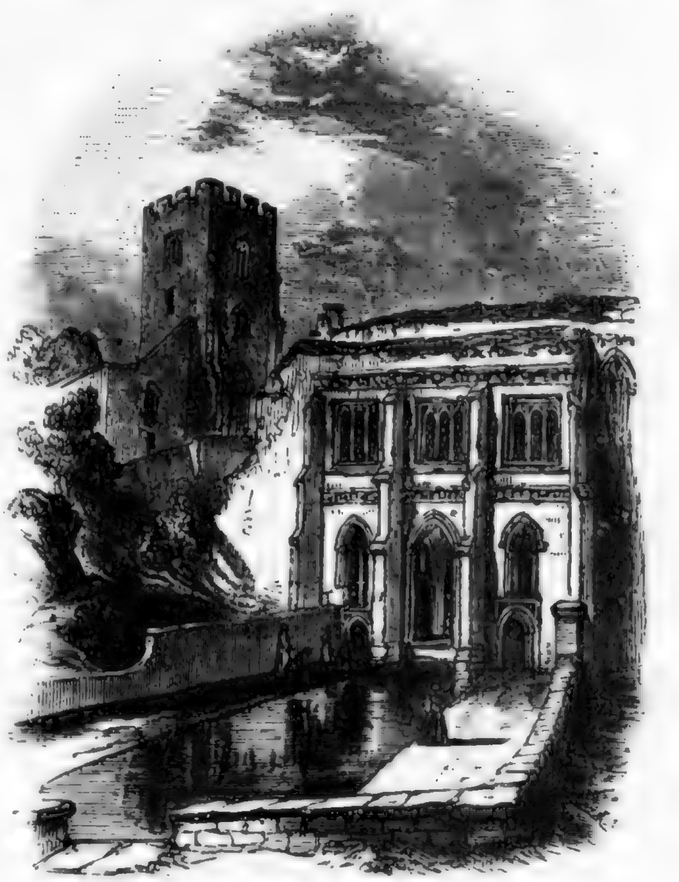
All that remains of Fair Rosamond is her well, which is still to be seen—"a quadrangular receptacle of most pure water, immediately from a little spring under the hill and overshadowed with trees." If water and looking-glasses could only revive the images that have once been reflected in them!

"Tideswell," near the village of that name in England, is very old and curious. According to ancient writers, it formerly ebbed and flowed four times in the space of an hour or thereabouts, but now it flows much seldomer; sometimes not more than once in two days.

Near the town of Southwell there are four wells which once possessed a miraculous healing power: Lord's Well, half a mile from the town; Holy Well, near the cloister of the abbey; Catherine's Well, at Westhorp, for rheumatic people; and Lady's Well, within the consecrated ground of the church. In the year 1764 the Rev. Mr. Fowler, a clergyman of the neighborhood, fell into this well and was drowned, and the sanctity of the water is supposed to have thereupon evaporated.



ST. CHAD'S WELL.



ST. WINIFRED'S WELL.

Another interesting well is that of King Richard III., on the battlefield of Bosworth, where the crook-back drank repeatedly on the day of the famous conflict. Tradition shows the very spot where he sat and refreshed himself.

But of all the English wells, scarcely excepting Rosamond's, the most notable is that of St. Chad, near Dr. Johnson's town of Lichfield, and at Stowe Church. It remains in some gardens adjoining the west end of that building. The water is sulphureted, and close to it is a pretty iron pump, giving water from a second well, which is superfine chalybeate. At the bottom of the steps leading to St. Chad's Well, and in the middle of the water, is a stone on which, some say, St. Chad was accustomed to stand and pray. At this well the saint had his oratory in the time of Ulphere, King of Mercia. He was a person devoted to solitude, and celebrated for his piety. He built himself a bower near the water on his first arrival, and, as the traditions say, he was nourished by the milk of a white hind, which remained dearly attached to his holy person. One day, by chance, Wulfhed and Rufinus, the sons of the king, chased this animal, which sought refuge in the oratory at Stowe. The young men were naturally amazed at finding a human being secreted in such a marshy wilderness, but at his request tarried, and were so charmed by his amiability and wisdom that they renewed their visit, and were instructed in the principles of the Christian religion. In due course they were converted and baptized at the well. Werebode, their father's evil counselor, discovered their apostasy from the heathen state, and informed the king. They fled, were pursued by the king's orders, and slain at Stowe. Later His Majesty became a sufferer from remorse, and sought out St. Chad and became also a convert. On the western site of the present Stowe Church the saint erected a rude chapel of earth, wood and stone. Half a century afterward his body, and that of Colred the King, were interred in the new church which the Bishop Hedda made. Up to the period of the English Reformation his body was enshrined in the cathedral church, and the shrine was the daily resort of many pilgrims. Another object of this kind of great interest is Shakespeare's Well, at Anne Hathaway's cottage, which has been frequently described. No visitor fails to drink from it, and all describe the water as pure and delicious. There can be no doubt that the poet often did slake his thirst here, and those who have done the same declare that nothing else brings so vividly the sense of a sort of personal association and contact with the divine English writer. He liked wine, as the tradition goes, and there is a story, doubtless unjust to his memory, which ascribes his death to too much conviviality; but he appreciated the charms of sweet, fresh water, as is evidenced by the many references to it in the plays — too familiar for quotation.

There are not a few famous old wells yet to be found in the City of London. Bridewell is an ancient historic site. Here stood the famous palace of Bridewell, which was so named from the well in the vicinity of St. Bride's Church. This was the first workhouse, and the name has been generally used for such establishments ever since. A writer describes prisoners of the vagabond class at work there in 1750.

Holywell Street, so often mentioned in novels, and by antiquarian writers, received its designation from a holy spring in the neighborhood, which is described by Fitz-Stephen as "sweete, wholesome and cleere, and much frequented by schollers and youth of the citie in Summer evenings, when they walk forth to take the air." The "Holy Well" is under the present Dog Tavern, No. 24. The street is chiefly tenanted now by old-clothes-men and second-hand booksellers, and the like. Some of the old gabled houses are worth seeing.

The most venerable of the London theatres is Sadler's Wells, on the southwest side of Islington, and so named from a mineral spring dispensed by the monks of the Priory of St. John of Jerusalem, in the time of Henry I. This custom died out, but was revived by one Sadler, who lived in the time of Charles II., and who rediscovered this well of "excellent steele waters." Here came hundreds to drink of them every morning, and among the rest Evelyn, the diarist, who says, under date of June 11th, 1686: "Went to the New Spa Well, near Myddleton's receptacle of water, at the New River." The well is now covered over, but is under the stage-door of the theatre.

A history of the water supply of London, with its millions of inhabitants, would be very curious and interesting. Springs and wells were formerly, as has been indicated, the chief reliance, but now the water is furnished by some ten or twelve companies, each serving a separate district, the chief of which is the New River Company, which provides the whole of the central part of the city with water, brought from springs and streams near Hertford by a remarkable artificial conduit. The mechanical arrangements are somewhat peculiar. The water supplied by this Company is first allowed to stand for a day or two in large subsiding-tanks, and is then filtered through fine sand; the filtered water is stored in covered reservoirs, and is forced by pumping power into the street mains, from which it passes by service-pipes, entering the houses. Millions of gallons are required every day. The character of the water, according to the best authorities, is entirely wholesome, although the fact has sometimes been questioned. The mineral contents are not only harmless, but, perhaps, even advantageous; and the organic matter is not objectionable. In quality it is of moderate hardness.

Generally speaking, the water supplies of the large cities, the towns, and even the villages, of this country are not of a wholesome character; and the spread of zymotic diseases seems to be sufficient evidence of the fact. The fluid is generally polluted by manufacturing establishments, and from various other sources. Renal maladies are also more numerous and complicated than ever before. In this light the disappearance of the sweet and homely old wells is to be regretted, to say nothing of the sentimental considerations.

HONEY IN THE DESERT.

The following illustrates a curious fact in the natural history of bees.

An English traveler, accompanied by one guide, wended his way across the long, weary miles of a northern arm of the Sahara Desert, on the confines of South Morocco. From one horizon to the other was a dead level of parched, stony ground, on which, as far as the eye could reach, the only trace of vegetation was an occasional small clump of a dried-up, thorny bush, called the "sidra." For forty miles they held on their way, watching for some sign of the few trees which marked the spring where their halting-place for the night would be.

It was the end of May, and the scorching rays of the sun were attaining their full severity. Now and again during the afternoon little whiffs of intensely heated wind would rush past the two riders, almost making them gasp for breath. At one moment when this occurred, the traveler noticed a slight movement on the part of his mule, and she seemed to push on with additional vigor, as if by some fresh impulse. Almost at the same instant the hot breath of the Desert seemed to carry across his own face a distinct perfume of honey. The traveler smiled to himself at the fancy—he would almost as soon have thought of searching that arid waste for snowdrops as for honey. So he said nothing to his interpreter.

Late in the evening they had camped amidst the little clusters of fig-trees, where a native farm had planted itself in the wilderness.

As their meal was preparing, there was brought into their tent the only offering within the means of these poverty-stricken, but hospitable natives—a capacious bowl of magnificent golden honeycomb.

"Well!" exclaimed the interpreter, in his imperfect English; "it's very odd, but while we were riding this afternoon, about ten or twelve miles from here, I thought once that I smelt honey. I didn't like to say anything, for I thought you would laugh at me."

Thus was ascertained the astonishing fact (confirmed by many other instances) of the vast distances traversed by the bee, regardless of the question of food, in order to select some abode suitable to its fancy. In this case, the nest must have been at least seven miles from any sort of vegetable production which can have afforded material for honey-making.

Allowing to a bee five trips to and fro during the working day, the industrious creature must have covered no less than seventy miles of flight in a direct line, without allowing anything for an irregular course, or for dodging about in search of its nutriment.

They were odd fellows, some of those old divines. This is how Bishop Butler, in all good faith, reproves a gentleman of his time: "He was a man of pleasures, who cared little for the solemnities of an execution." This execution was the gentleman's own.

SET THE CHAIR BACK.

By Benj. G. Smith.

"I am burning! I am burning!
Into charcoal I am turning!"
Cried a mighty King of Spain.
"Oh, you pampered menials lazy,
Don't you see I'm going crazy?
Quick! relieve me of my pain!

"Don't stand there so stupid staring,
All my patience quite outwearing,
Or you'll rouse my dreadful ire.
Bear away and swiftly carry—
Neither hesitate nor tarry—
Take away this roaring fire.

"Will you let your royal master,
Suffer such a dire disaster;
Such a sad impending fate;
Such a fiery fate infernal,
While his mind, in thought supernal,
Meditates affairs of state!

"Why, oh, why—oh, why delay you?
Take away at once, I pray you,
All this raging fire and flame!
Why, oh, will you disobey me,
You, who sometimes humbly pray me!
Am I only king in name!"

Then a cunning old attendant,
Giving courage the ascendant,
Bowing courtly very low,
And His majesty approaching,
Hoping he was not encroaching,
In his speaking freely so.

And would put in form of question,
If he might not make suggestion—
Ask respectful leave to say,
Comfort would be had completely,
Quickly too and very neatly,
If the king would move away.

Then at once a thought went flashing,
Like a brilliant meteor crashing
Through the mighty royal brain.
Moved he then his chair back lightly,
With a manner stately, knightly,
As became a King of Spain.

And with kindly condescension,
Hinted at a royal mention
Of the courtier bold and true,
So that he, throughout the ages,
Might be counted with the sages,
As to him was justly due.

Vanity us all beguiling,
Leads us into softly smiling
At the folly of the king;
While a very common failing,
And an error much prevailing,
Is to do this very thing.

Labor agitators vainly,
And the world's reformers mainly,
Since Wat Tyler left the forge—
Bearer of a bold petition,
Soon to perish in sedition—
Down to kindly Henry George—

At a superficial mending,
And an outward careful tending
Of extremities begin—
Aim at changing the external,
Leaving all the old infernal
Of the sepulchre within.

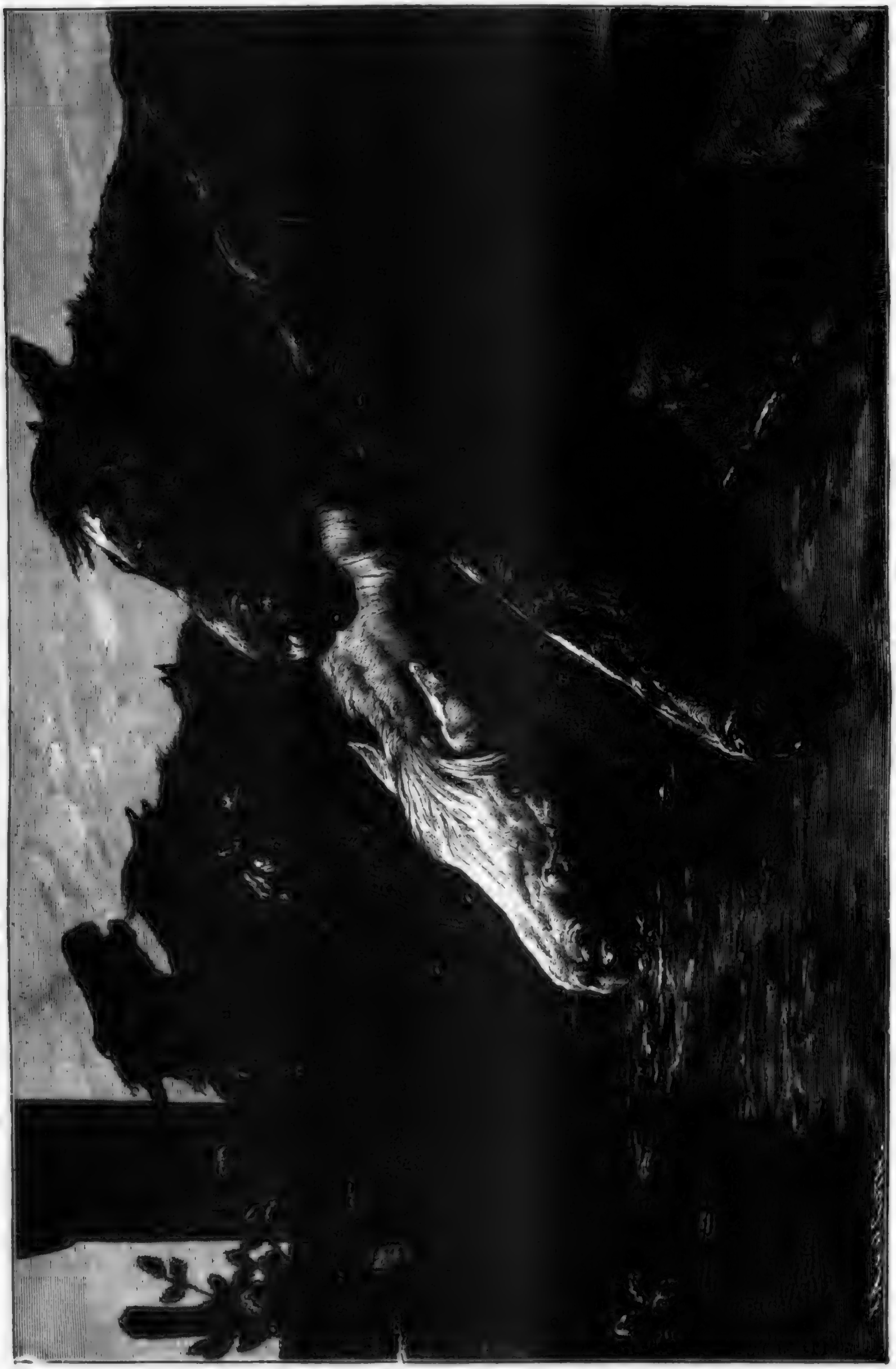
If we do sincerely care to
Banish ills that flesh is heir to,
Let us, quickly as we can—
Treating his externals lightly,
And disorders all unsightly—
Reach and elevate the man.

Any one at this conclusion
May arrive without confusion;
Any one may clearly see
(If he have a mind reflective),
Such as is mankind's subjective,
Will the world's objective be.

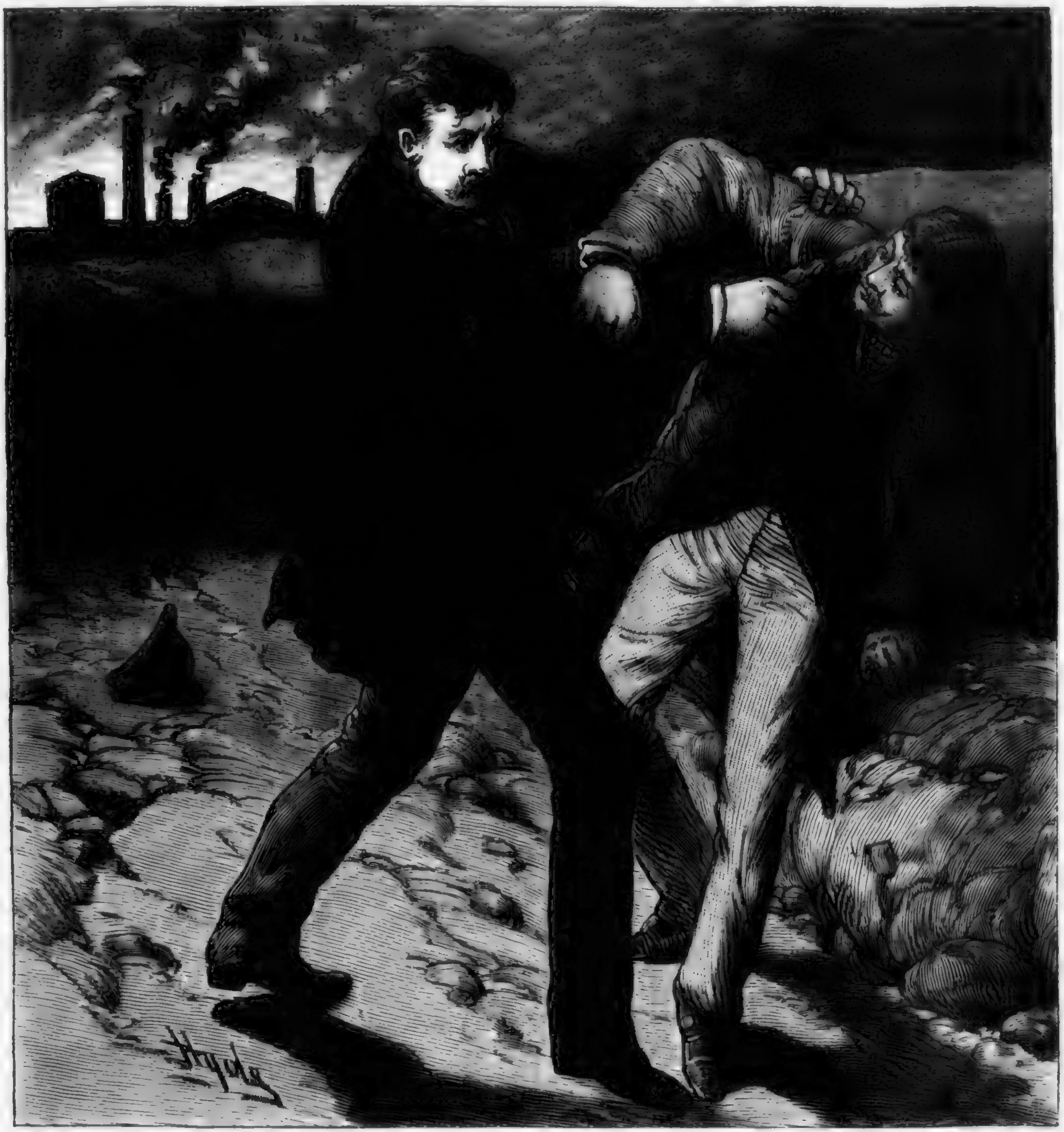
AN ENORMOUS SLAB.

To separate from the main ledge a slab of granite 354 feet long, 3 to 4 feet thick, and 11 feet wide, is no ordinary feat to accomplish. But this has been done at a quarry in Massachusetts, and by the means usual in all quarries for separating slabs or blocks from the main ledge. A row of wedges was set, several hundred in number, and the workmen, beginning at one end, gently and carefully tapped the wedges, moving by degrees down the line, until the other end of them was reached, when the same operation was repeated. In this manner, by careful and patient application, aided by favorable conditions of the weather, the slab of the above phenomenal size was successfully separated from the main rock. The value of this immense slab, if it could have been transferred safely to a town, at not too great cost, would have been several thousand dollars. And it seemed almost sacrilegious that it was necessary to cut it up into smaller blocks for transportation, to be finally used for ordinary building purposes. The possibility of getting out a slab of such size without breaking it indicates that the grain of the granite not only runs evenly, but that it possesses great tenacity.

The Modern Foot.—In Greek statues, as is well known, the second toe of the foot is represented as longer than the great toe, while in the modern European foot the great toe is usually the longer. Albrecht states that in this respect the Greek foot is more quadrumanous than the modern. The second toe is also represented in antique statues as being further separated from the great toe than is seen at the present time. This might be regarded as another evidence of quadrumanous character; but it has also been suggested, and not without reason, that it is simply the result of wearing the sandal strap. In the modern foot, on the other hand, the reduction in the size of the smaller toe is ascribed to the influence of shoes.



OLD WELLS.—THE THIRSTY SUMMER DAYS.—SEE PAGE 40.



A BANKRUPT COURTSHIP.—"THE TWO MEN RECOGNIZED EACH OTHER. BRYANT'S HOLD RELAXED. 'GREAT HEAVENS!' HE SAID, 'YOU ARE PERRY STEVENS.'"

A BANKRUPT COURTSHIP.

By Frances B. Currie.

Mr. Richard Bryant sat behind a window of the Craddock Club-house awaiting the arrival of the Pandemonium Coaching Club. Every week during the Autumn the tally-ho coaches, with their gaudy trappings and gay outriders, had rattled down to Pandemonia and back again to Craddock Town. But to-day was to be their last appearance until warmer weather, and the entire coaching club was to turn out in jolly procession.

Ordinarily Mr. Richard Bryant felt little interest in tally-ho coaches and their passengers. His life was so filled with business interests and business cares that he had little time for frivolities. But for once he was idle, and he sat and smoked and waited for the procession of coaches.

He was regarded as the most important personage in his town, for he was the president of the famous Craddock Oil Company. Everybody knew what a gigantic monopoly that company had become, and how it had systematically bought out and swallowed up every rival corporation that had strength enough to affect its interests. Everybody who was fortunate enough to own stock in the company looked as sleek and satisfied as oil and success could make him. Thus far it had been a rich and prosperous corporation, and, as I said before, Richard Bryant was its fortunate chief.

He had not always been a capitalist. Craddock had not always yielded him fat positions. Twenty years before this story opens the best place the town would afford him was a small clerkship at the oil wells. If he had then been a candidate for membership of this same club in whose parlor he was now so snugly ensconced, he would have been promptly blackballed. He was an obscure stripling twenty years ago, whom nobody knew or cared to know; to-day he was a man of wealth and influence. His star had risen.

He had no one but himself to thank for his good fortune. No one had helped him to become rich. By his unflinching energy and clearheadedness he had enriched himself. Society had never received him until she discovered that he was bound to succeed without asking or caring for her assistance. Richard Bryant was as independent of society as a lion is independent of the petty attentions of a jackal.

He had never married. In his youth he had been too poor and too busy to think of marriage. He had courted nobody, and certainly nobody had courted him. He had not been attractive to the girls, for he had been rather unprepossessing. His eyes were undeniably handsome, but his long, angular body, his swarthy skin, and strong, irregular features had won for him the *sobriquet* of "Ugly Dick," a nickname that had clung to him until the days of his prosperity.

His appearance had improved somewhat with his circumstances. His figure had gained some rotundity. Good living and good sleep had taken the haggard look out of his face. He had now the perfect dress and the comfortable air of the capitalist, in lieu of the threadbare garb and troubled expression of the indigent clerk. Men and women discovered new attractions in him daily. Mothers angled for him for their daughters, and paterfamilias constantly invited him to dine. Although he was forty years old young ladies wore their prettiest dresses to attract this prosaic, determined man, who did not know a Parisian costume from a linsey-woolsey. But all this was in vain. The only woman for whom he felt more than casual interest was Adrienne Stanton, and he was waiting to see the coaching club solely because she was to be one of its party. Although he loved her it cannot be said that on this occasion he anticipated much pleasure in seeing her. She would ride past the Craddock Club-house in company with his rival!

Very few men are generous enough to admire their rivals, and in this particular Bryant was not exceptional. Instead of admiring Perry Stevens he despised him. Stevens was not overstocked with brains, and Bryant, who was a man of really exceptional intelligence, considered him a fool. Stevens was twenty-eight years old and a Bostonian. He had come to Craddock from New England with a great many Old England notions. He aped the cockneys in their dress, their pronunciation and their sports. He had lived in London during a season or two, where he had employed his time in acquiring the style and habits of the fops of Great Britain, and had returned to America a very bad caricature of juvenile John Bull. Bryant, who was a typical American, and therefore proud of his country, had an almost savage intolerance of all this folly. No self-made man in a free and essentially democratic country could regard it much more leniently.

But Stevens had money, which in the eyes of society covered a multitude of sins. He had as much by inheritance as Bryant had gained by twenty years of persistent labor. When Stevens had fancied that he would like to be a director of the Craddock Oil Company, his money bought him stock enough to give him the appointment. It gave this ignorant youth a seat beside hoary-headed directors who had manufactured oil before the lamp of his little life was lighted.

The procession of coaches came down the street at a break-neck pace. The owners drove their six-in-hand most cleverly; the ladies upon the coaches wore costumes that astonished even the well-dressed town of Craddock; the lackeys blew their trumpets lustily, and the horses reared and plunged after the most approved and spirited style. Perry Stevens drove six thoroughbreds. He wore a brand-new coaching costume, imported for the occasion. He wore his hair combed forward after the fashion of a lady's bang. He snapped his whip and smiled at Miss Stanton, showing a row of pretty, white teeth under his little waxed mustache.

With darkened countenance Richard Bryant watched the couple. He had waited to see them because he thought the sight would be wholesome discipline for him. If they were engaged, as the gossips declared they were, he must become accustomed to seeing them together. But the sight of Adrienne's flushed and happy face stirred him powerfully. He noticed how young and beautiful she appeared. She was twenty-seven years of age, but her figure and complexion were as youthful and fresh as a girl's in her teens. He watched the pair until they flashed out of sight, and then he put on his overcoat and walked home. He was a man of powerful physique, who could have crushed his rival with one hand; but he went home feeling as if they had met in combat and Stevens had worsted him. He felt old and ponderous.

"So that is my rival!" he said to himself, while he recalled Stevens's slim, little figure, his eyeglass and his *bang*. In spite of his depression, he grimly smiled at the picture. "Ugly Dick, this ought to kill the last vestige of your vanity," he said.

Bryant repeatedly told himself that he could have forgiven Adrienne for preferring another man to himself. He was thirteen years her senior, was not "a society man," and was certainly not an "Adonis." There were many men of brains who were younger, more agreeable, and better-looking than he, and it would have seemed natural for her to prefer one of them. But Stevens! Bryant could find no language to express his scorn of "the little ape," as he mentally styled him. Bryant had been a very frequent visitor at the Stantons' residence until the day of the Tally-ho Carnival. Adrienne's appearance on Stevens's coach had given confirmation to the rumor that they were betrothed, and Bryant decided that his visits were not necessary to Miss Stanton's happiness. He was in a bad humor and he staid at home.

He soon had little time for reflection, for his company became involved in difficulties which absorbed his attention. Once in a while—sometimes at his committee meetings, sometimes when he was addressing the board of directors—his mind reverted to the woman he loved. But he did not encourage these thoughts of her, and the sight of Stevens's dandy figure always enabled him to rid himself of any tender retrospection. Bryant was convinced that she could not care for Stevens. No woman of her refinement and attainments could really esteem the little millionaire. It must be that this woman, with all her intelligence, her courage and her kindness of heart, had a serious—a revolting fault. She must be grossly and inordinately fond of money or she would not think of marrying Perry Stevens. There must be an ugly blot on what Bryant had deemed a spotless character.

A daring speculator, named Ezra Keene, had formed a new oil company that was seriously damaging the old. Keene was an unscrupulous manipulator of stocks, who for years had watched the Craddock Oil Company, but had never been admitted to its directorship. Now he had formed an opposition company to help him gain the long-coveted prize. He claimed that he had discovered certain means of refining oil, of which the Craddock company was still in ignorance. He was underselling them and gaining so many of their customers that their receipts were decreasing alarmingly. The newspapers were filled with accounts of the cheapness and purity of the new oil, and the Craddock oil stock fell very low indeed. Some of the directors of the old company discussed the advisability of trying to buy Keene out, to get him and this cheap oil out of their way, but Bryant was bitterly opposed to having any dealings with him. To buy Keene out meant to consolidate the two companies, and to admit Keene into the charmed circle of the Craddock Oil Company.

"We all know Keene's reputation," he said. "His dishonesty is proverbial, and any reputable company must lose caste by association with him. He has broken every contract he has ever made, hoping afterward to compromise matters and then gain some advantages that the original agreement did not give him. He has enriched himself by robbing everybody who has trusted him. He has wrecked every enterprise in which he has had power. If we admit such a wolf into our fold, the natural deduction follows: we will be fleeced. We all know what it costs to manufacture good oil. We know that Keene cannot make good oil and sell it at his present figures without loss to his company. Our best plan seems to be to leave him alone and let him ruin himself. He will be forced to raise the price of oil or go to the wall. If we should buy him out, a dozen other mushroom companies will spring up for the purpose of being bought out also. We cannot purchase rival companies indefinitely."

The directors agreed to make no concessions to Keene. As they feared he would skirmish around and try to get a "majority" of their stock, they agreed that they would not sell a single share while the Keene Oil Company was fighting them.

There was a rumor afloat in the town of Craddock that Miss Stanton's father was on the brink of bankruptcy. Perry Stevens heard it, and, singularly enough, was glad to know that it was true. Contrary to the gossip concerning them, Mr. Stevens and Miss Stanton were not engaged, and, in spite of his wealth and vanity, there were times when he seriously doubted that he was progressing well in his courtship. He had determined to marry Adrienne, and had been annoyed to find that she did not appear to appreciate the advantageousness of such a match. She allowed Stevens to escort her to various places and received his visits, but she had never given him an opportunity to present his suit. He had an uncomfortable fear that she preferred some one else, and a suspicion had arisen in his mind that the "some one" was Richard Bryant.

He hated Bryant. Stevens was not over sensitive, nor was he very keen in his perceptions, but he had made the discovery that Bryant disapproved of his being a director of the oil company. He knew that Bryant considered him inefficient and silly, and he inwardly chafed under this very correct analysis of his character. If Stevens was sincere in anything, it was in his vindictive hatred for Bryant.

Mr. Stanton could not continue in his business unless he was provided with ready money, and Stevens contemplated lending him what he required. He realized that this would be an excellent opportunity for winning Adrienne's regard and gratitude, and was feverishly anxious lest Bryant should forestall him. It would be like Bryant to offer aid in this emergency.

Stevens did more serious thinking in a few hours than he had done in his previous life, and the result was that he formed a plan to ruin Bryant and to secure Adrienne Stanton's hand in marriage. He decided to be a traitor to his company, to break his agreement with the other directors, and to sell out all of his oil stock! He knew what would be the result. Keene would obtain a "majority" of the stock, and consequently control the Craddock Oil Company. The present officers would be turned out of their positions. The new company's stock would greatly increase in value, and the old would fall very far below its actual worth. Bryant would lose the presidency and the yearly fortune it had yielded him, and, as the bulk of his wealth was invested in his company, he would be too much impoverished to lend assistance to his friend.

Stevens knew that Adrienne was devotedly fond of her father, and he intended to profit by this affection. His plan was to propose to her at once. If she demurred he would offer immediate assistance to her father on condition that she would consent to his proposal. He was certain that her love and pity for her father would induce her to agree to almost any terms that would relieve his present anxieties. As soon as Stevens had completed his plan he started out to put it into execution.

* * * * * *

Mr. Bryant also heard of Mr. Stanton's troubles, and as soon as possible he went to see his friend.

Bryant was in no enviable frame of mind himself, and seemed in no mental condition to offer consolation. All the newspapers had been recently filled with accounts of Keene's victory over the Craddock Oil Company. Stevens had sold out his company—Bryant had lost his position. He was bitterly incensed at the turn affairs had taken; angered beyond expression because a man whom he considered a mere pygmy had proved powerful enough to make all this mischief.

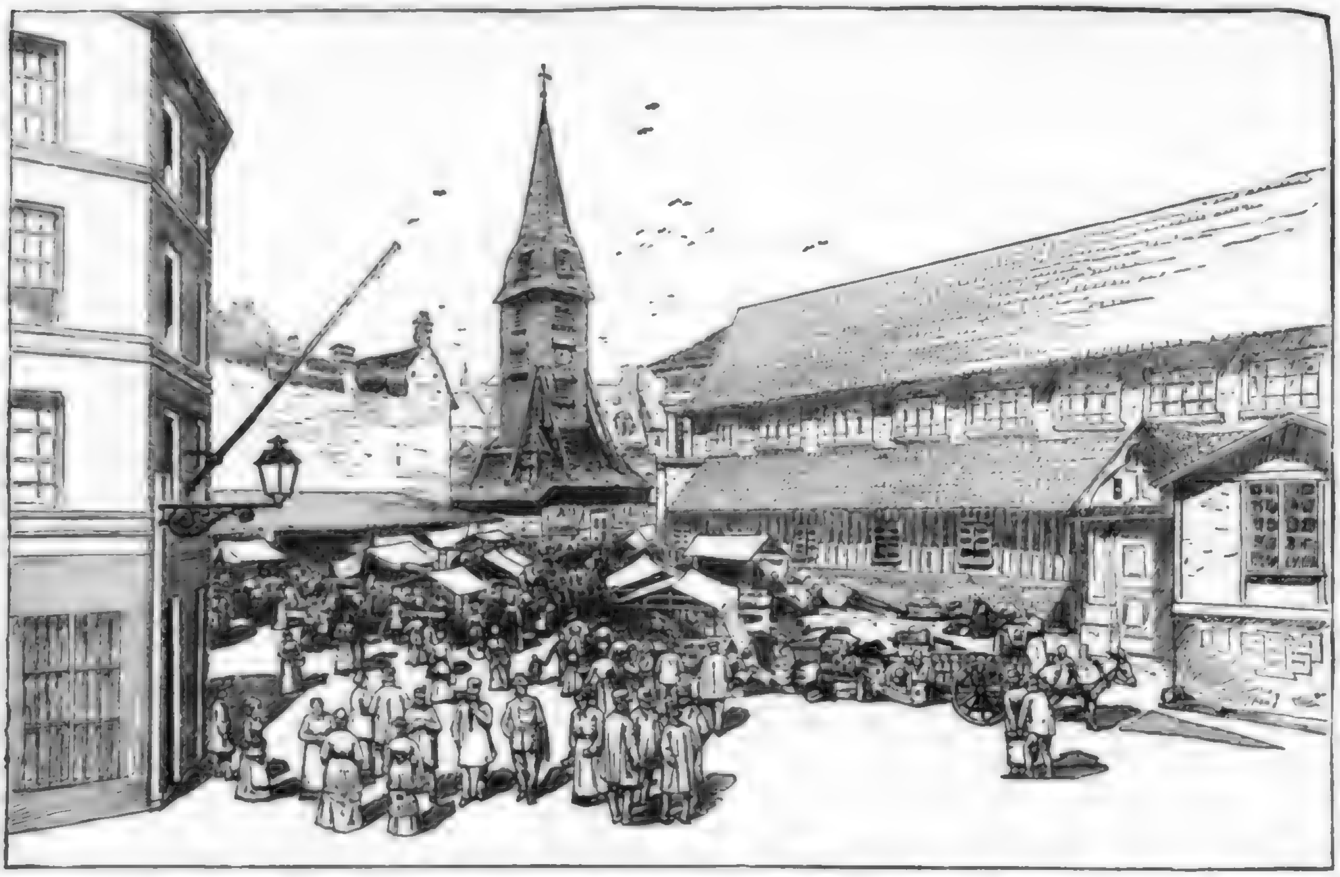
Bryant had not called at the Stantons' for weeks, and if Adrienne had ever cared for his visits she had reason to resent his protected absence. He was not vain enough to think that she had missed him, and he remembered, with something like a grimace, that Stevens had always been close at hand to prevent her from being lonesome. The thought aroused his temper, and he rang the doorbell so vigorously that it startled him. He heard the butler rushing up the stairs, and realized that the man would open the door in a moment, expecting to hear that the house was in flames, or that his master had shot himself. It required some nerve to enable him to look the servant calmly in the face and ask if Mr. Stanton was at home!

Mr. Stanton was in Boston, but Miss Adrienne was at home, and received the visitor.

As soon as they met, Bryant was conscious of a change in her. She was no less cordial than of old, but there was a certain air of seriousness and dignity in her manner that differed from her former frank ingenuousness. He wondered whether her betrothal to Stevens had wrought the change in her. Could it be that she had idealized her betrothed and was sacrificing to him her woman's devotion? Was she growing better and sweeter for the fatal mistake she was making?

When they were seated she was the first to speak. She was sitting before the open fire, her hands lying idly in her lap and the firelight shining softly on her face and hair.

"I am very glad that you came to-night," she said,



A TOUR THROUGH NORMANDY.—MARKET-PLACE, HONFLEUR, AND STE. CATHERINE'S BELFRY.—SEE PAGE 55.

"although your visit was intended for my father, and he is not at home. In a very few days I am going to sail for England, and as soon as possible my father will follow me. I never expect to see this place again, and before I go I want to say good-by to all my Craddock friends. My father's financial affairs will force him to give up his business, this house and this furniture. He will have to begin life all over again. My home will be in London, and I have persuaded him to come and live near me?"

"Are you sure that your father must fail? Cannot something be done to help him over his difficulties? I must see him as soon as he returns."

He had risen to his feet, and was restlessly pacing the floor. He was powerfully affected by what she had told him. She was going away, and her home would be in London! He remembered Stevens's *penchant* for London, and concluded that they intended to be married privately, and then make their home in the giant city. Stevens was rich enough to live where he pleased.

It hurt Bryant cruelly to know that this would probably be his last interview with the woman he loved, but in his infinite generosity he thought less of his own suffering than of the unhappiness in store for her. What an awakening she would experience when she learned Stevens's actual worthlessness!

It pained Bryant to think of honest John Stanton being exiled because of his misfortunes, and he wondered why Stevens had not helped him.

Bryant's visit was short, but before he went away he told Adrienne how deeply he regretted her father's misfortune, and how much he desired to be of service to them both. He told her that he hoped her life in England would be very happy, and then he said good-by. He went away abruptly, leaving her puzzled by his manner. He had somewhere in a suburb of the town a private office, where he sometimes went and locked himself in, away from all intruders. He visited this "den," as he called it, after his interview with Adrienne, and reviewed his situation. He realized that Stevens had robbed him of everything in life that he held dear.

He was in his room on the following evening, when he heard a little altercation at the door. A lady was seeking admittance, and was being refused by the boy in attendance. Bryant's heart gave a great bound at the sound of Adrienne Stanton's voice, and he was at her side in a moment.

She was very pale, and her eyes were brilliant with intense excitement. She spoke at once:

"I have accidentally heard there is a scheme to burn the Craddock Oil factories to-night. The time set for igniting them is ten o'clock. I was sketching in the tower on Craddock Hill to-day, and two men entered it. They staid in the room below mine, and discussed their plan to burn the factories. As the day was so cold they believed the tower was deserted. I dared not move lest they would discover me, and I have been kept a prisoner there until now. They said that there was no watchman in the Bryant refinery, and their plan is to start the fire in that building."

She was exhausted, and nearly frozen, but she bore her discomforts without complaint. It was nine o'clock now, and there was no time to lose. He begged her to be seated beside his fire, while he telegraphed to the police station for assistance, and to his stable for a horse. She watched him quickly making his preparations, and she did not interrupt him. He asked her to wait there until his return from the factories.

"I will not be gone long," he said, "and will take you home. I beg you to wait here and to allow my servant to make you as comfortable as possible."

He was away in an incredibly short time, riding hard toward the factories from which he had derived a living for many years. When he reached the grounds he realized that he was too late. For some reason the incendiaries had changed their plan and started the fire before the appointed time. The police and Bryant reached the place simultaneously. One of the incendiaries was making a narrow escape from a burning building. The oil blazed as only oil can burn, the fire making such violent headway that the wretched creature was nearly overtaken by the flames. He rushed out blindly, the glare and roar of burning oil and timber terrifying him almost to madness. Bryant saw him and pursued him. The man ran like a deer, but Bryant gained on him, and finally caught him. As he held him the fire suddenly burst through the refinery windows. Its lurid light shone red and glaring upon Bryant's prisoner, and the two men recognized each other.

Bryant's hold relaxed.

"Great heavens!" he said. "You are Perry Stevens."

"And he is my prisoner," a police officer said, and took Stevens into custody.

Bryant rode back to his office very slowly. He had promised Adrienne that he would soon return, but he found it hard to keep his promise. The factories were doomed. He never once looked back at the awful glare that told all Craddock of the fire. The sky and earth might be dyed in red for all he knew or cared. He could think of nothing but the task before him—the task of telling Adrienne Stanton of her lover's arrest. To-morrow all the newspapers would contain accounts of Stevens's incarceration. It was best that she should hear the story first from the lips of a friend.

What a singular fatality there seemed to be in her having been his betrayer! She had gone to the Craddock Tower to sketch. She expected to sail for England on the morrow, and she had wished to take with her some pictures of the place that had been her home for a score of years. The tower had an upper and lower room, with an open spiral staircase in the centre. She had seated herself in the upper room, and had not been observed by Stevens and his accomplice. The plotters had felt secure in that silent, lonely place, and had talked aloud.

Why had she not recognized Stevens's voice? Bryant decided that distance had made it seem unfamiliar to her. Perhaps he had taken little part in the conversation, or perhaps Adrienne had heard his voice and failed to believe the evidence of her senses.

And this man, who had nearly lost his life in trying to injure his fellows; who had burned or helped burn the Craddock factories, and who was now behind prison-bars, was the man who was to have married Adrienne Stanton on the morrow! How could Bryant break her heart by telling her that her betrothed was a prisoner, and that her evidence had been conducive to his capture?

He went up to the room where she was waiting, dreading his task, and suffering keenly because of the wound he must inflict. She stood before a window watching the distant fire. As she turned and saw his face she thought she read his trouble.

"I came too late," she said. "I am very sorry that I could not have helped you to save the buildings."

"You made a brave effort," he said; "but nothing could save them. By the time the fire-engines arrived the oil was blazing, and water had no effect upon it."

She drew her cloak about her preparatory to leaving, but he detained her.

"I have something to tell you before you go," he said, his eyes filled with divine pity; "something that will grieve you cruelly. You are brave, Adrienne, but you will need all your courage now, and all of your self-control. Some one whom you know and respect has been arrested. He has been charged with willfully burning the Craddock factories. Shall I tell you who it is?"

He was astonished at her calmness.

"You need not tell me," she said. "I know who was in the tower to-day. It was no one whom I respect. It was Perry Stevens with his *valet.*"

"Adrienne!" He stopped her so sternly that her lips quivered. "Remember that you were to have been his wife. Don't condemn him before he has been convicted."

The blood surged into her face, dyeing it and her neck a warm, sweet crimson.

"I am not his promised wife, and never was, and never thought of being. I owe him no allegiance."

"But," he said, eagerly, his heart beating with a new, glad hope, "I thought you were to be married and sail for Europe to-morrow. Did you not tell me that your home was to be in London?"

"My father's sister offered me a home with her," she said, "and I accepted it. It is in London. If you have finished your catechism now I would like you to take me home."

"I have *not* finished," he told her. "I have another question yet to ask. Will you marry me, Adrienne?"

* * * * * *

Mr. Stanton did not fail and Bryant was not ruined, after all. As the latter expressed it, he had "unloaded"

his stock immediately after Keene's admission into the company and before the fire. He had lost heavily by Stevens's treachery, but was still a man of generous means. He helped John Stanton over his difficulties, and was himself made president of a new corporation formed by the former directors of the Craddock Oil Company. In time he understood Stevens's object for burning the factories. Stevens had been bitterly disappointed by Miss Stanton's refusal of his offer. He had offered to aid her father if she would yield, but Adrienne was as firm as adamant. She would rather see her father ruined than save him by such methods. Stevens left her, feeling more fully convinced than ever before that Bryant was in his way. In his jealous rage, he determined to complete his rival's ruin by burning the factories. He believed that Bryant's money was all invested in Craddock oil, and he determined to destroy the property.

His *valet* was never caught, and Stevens was never brought to trial. He forfeited very heavy bail and ran away.

Adrienne did not go away to London. She had her choice between going there or marrying Bryant. She preferred the alternative, and is very happy with "Ugly Dick."

A CERTAIN smatterer in letters, being at a well-known literary club, took it into his head to abuse with great freedom all the modern literati, observing that there was but very little wit, humor or learning in the present age. Some time after one of our most popular writers came into the room, when a gentleman told him how his friend had been abusing "the moderns." "I have not the least doubt of his ill-nature," said the author; "he would abuse the ancients, too, if he knew their names."

EDIBLE BIRD-NESTS.

THERE are certain caves in islands off the coast of the Malay Peninsula where edible bird-nests are produced. The islands are very small, and almost inaccessible; they lie between 8° and 10° N. latitude, and between twenty and forty miles off the coast. They belong to the Siamese Government, and are farmed out to contractors, who collect the nests, and dispatch them to China. The harvest is during the months of March and April. As soon as the nests are built, and before the swallows begin to lay their eggs, they are collected. The birds then build second nests, and these are likewise taken away. The third nests are left undisturbed for the birds to lay and hatch. The island visited by the Danish writer was about 500 feet high and 3,000 feet in diameter.

The caves are accessible by means of rattan ladders, and the nests are collected from the roofs by means of rattan galleries and stagings. To show the impossibility of ingress and egress without artificial assistance, it is stated that about forty years ago, before the collection and sale of the nests was made a Government monopoly, about fifty Malays arrived at the caves before the Siamese, and commenced taking the nests; while they were engaged in this the Siamese arrived, and in revenge ran away with the rattan ladders, leaving the whole of the Malays to die of hunger and thirst in the caves, from which their only means of escape had been taken. Their skeletons are still in the caves. These Siamese caves appear smaller, not so well ordered, and infinitely wilder and more dangerous than those at Gomanton, but otherwise there appears little difference in the nests themselves, or in the mode of collecting them.

"UNDER THE HARVEST MOON."

BY JOHN F. ROLPH.

IT is a home of peace: in all the glory
Of Autumn's bravery of red and gold,
Stand beech and elm about the minster hoary,
Within whose walls our fathers knelt of old.

The place is holy ground: yet sounds of singing
Ascend not hence, nor wingèd words of prayer,
Save when, from yonder hamlet slowly bringing
A lifeless form to lay with loving care

Among "familiar dust," come sons of labor,
And careless children throng the hallowed sward,
While, by the graveside of their ancient neighbor,
The priest recites the goodness of the Lord.

Above the trees the harvest moon is shining:
Upon the church—about whose crumbling walls
The constant ivy's myriad leaves are twining—
The pale, soft beam in gentle radiance falls.

Within the fane the silvery light is streaming
Through ruined windows, once with stories dight,
Athwart the tombs where lie, as though a-dreaming,
The carven forms of old-time dame and knight.

It floods the nave: and in its rays the chancel
Resplendent glows as in the days of yore,
When here was preached the faith no change can cancel,
Since, like its Lord, it liveth evermore.

I read the mottoes from the old evangels,
And in a faded fresco dimly trace
The simple legend of the children's angels,
Who alway do behold the Father's face:

Then from these courts, where nevermore may mortal
Be trained for this world's cross and that world's palm,
I pass to where, without the brier-choked portal,
Faint lingers yet the breath of Summer's balm.

Beneath my feet the listless dead are sleeping:
The winds are whist: naught breaks the stillness save
A broken sob from yon lone orphan, keeping
Her wonted tryst beside a grass-grown grave;

Or some faint echo of the ceaseless riot,
That throbbeth through the arteries within
The heart of the great City of Disquiet,
Where stalk the shapes of Selfishness and Sin.

It is a home of peace: yet, unattending,
My truant fancy these calm precincts leaves,
For distant fields where long since two were wending
Their way at eventide among the sheaves.

This place is holy ground: but each heart taketh
Unto itself a place to build a shrine:
And oft, in love, unto its Mecca maketh
A pilgrimage; and so this heart of mine

Goes forth from hence to-night across the meadows
And all the glistening miles that lie between,
To where the cypress casts its slender shadows
In the soft moonlight o'er a mound of green.

A TOUR THROUGH NORMANDY.

By L. E. C.

The quaint old French towns are beautiful, and I found none more so than the village of Honfleur, at the mouth of the Seine, which claims to date from the time of the Roman emperors. Here Cæsar embarked for the conquest of Britain, and it was again to this little port that he returned.

The ancient seaport town of Portus-Itius lay, indeed, nearer the sea than the present Honfleur. Built on a promontory which extends out into the waves, it was, in time, inundated and completely destroyed. A new city, named Honne-fleur, grew up near the ruins of Portus-Itius, and at the end of the reign of Charlemagne fortifications were erected around this town. It was at this period that commenced the ravaging of Neustria by the Norsemen, only ending after the establishment of the dominion of Rollo over the country, which became the Duchy of Normandy.

Honfleur remained under the rule of the Normans until 1106, when William II., Count of Mortaine and Lord of Honfleur, tried by force of arms to take the County of Kent, which he had in vain claimed from Henry I. of England, as heir of his uncle Odo, Bishop of Bayeux. In the struggle he lost his possessions and his liberty. Honfleur was then held by the English until Geoffroy, Duke of Anjou, wrested it from Stephen of England.

Amid all this, Honfleur became a commercial port of considerable importance. When Henry V. reconquered Normandy, that young English King made Honfleur his residence. It was at this epoch, 1443, that the churches of St. Leonard and St. Catherine were built.

At last, under Charles VII., France succeeded in expelling the English from Normandy, and no stranger has since held sway there. But in 1871 the Prussians encamped in the environs of Honfleur. The 23d of February they entered the town, violating the conditions of the armistice.

In 1833 Louis Philippe visited Honfleur, and was received with all the honors that the town could display; but fifteen years later he was again at Honfleur, a fugitive, endeavoring in disguise to reach secretly the shores of England.

But enough of dry history, of battles and bloodshed and dark days. We are in the old Church of St. Leonard. It is May, the month dedicated to the Virgin, and so, especially dear to the Honfleurais. The shrine of the Madonna is one mass of white flowers, which fill the air with a rare perfume. In the centre of the church are the children, the boys on one side, the girls on the other, undergoing a cross-examination in their catechism by the priests, to decide on their admission amongst the "first communicants" at the end of the month.

Unlike the other churches, St. Leonard's is painted inside; the pillars are of a deep red, the ceiling in many brilliant colors.

As we leave the church we look round at the picturesque old houses, rising high and narrow, nearly every window having its *jardinier* filled with flowers, while mosses and lichens creep over the roofs, and tufts of snapdragon force their way between the stones of the walls. What thrilling histories lie under their weight of years: of the days of 1557, when those who refused to abjure the creed of their fathers were mowed down, and the streets reeked with blood. A few years roll by, and royal visitors, with brilliant pageants, fill the streets, and feasting takes the place of savage butchery; while music, jest and laughter float in the idle air, and the old town is gay. And later on, again, when Honfleur has recovered from the effects of its warfares, and new buildings rise on the old ruins, its ships go out with merchandise, and its traders return from the Congo freighted with slaves—black creatures that crouch with fear, and look in wonder at their strange surroundings, and shiver at the cool wind of the north when it touches their naked bodies. Those are the sights and pictures that those old houses hold, the memory of which clings to the very mortar now covered with mosses and lichens.

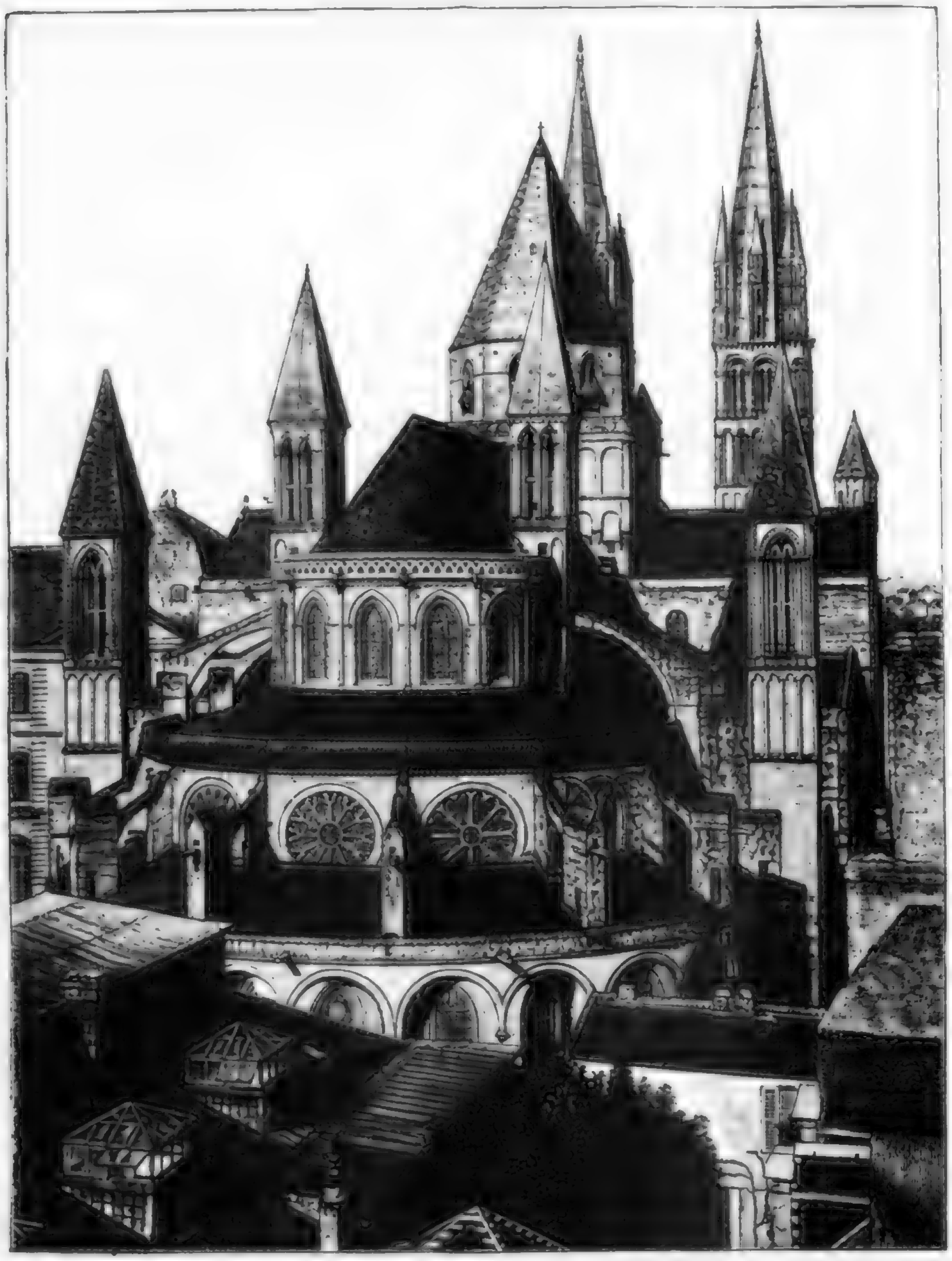
We go down (for a French country town is all ups and downs) to the Place Ste. Catherine. It is market-day, and the stalls are piled high with luscious fruit, choice vegetables, fresh eggs, and butter that has no equal; bunches of old-fashioned, sweet-smelling flowers lie in profusion, for which one pays but a few *sous*. One side of the market-place is formed by the Church of Ste. Catherine, now classed amongst the historical monuments of Honfleur. The belfry, a quaint-looking structure, with the upper part supported by wooden beams, stands in front of the church, but separated from it by a narrow street; many call it "the church with the street running through it." The lower part is used as a storehouse.

We follow the Rue Dupuits, which is gradually lost in a country road leading to the Chapel of Notre Dame de Grâce. This is the church of the pilgrim, and to this shrine the sailor and poor fisherman turn in spirit when the tempest rages and the angry sea threatens to engulf his frail bark; by the number of *ex votos*, I would judge that their faith is rewarded, and that the "Te Deum" has often been sung both by young and old.

It is a pretty little chapel, of the beginning of the seventeenth century, built in the form of a cross, with a rounded, domed porch. Inside, the walls are covered with paintings, representing fearful disasters at sea; at each altar are hung wreaths, and the white ribbon badges worn by the boys at their first communion, and even the crutches of cripples, as offerings to the Virgin for answered prayers. From the ceiling are suspended miniature ships, the mariners' offerings in memory of dangers passed. In olden days, princes and princesses, the great, the rich, the powerful, paid their homage here, till, by their donations, it became one of the richest in the country.

At a little distance from the church is the restaurant of The Renaissance, a good old-fashioned farmhouse where the pilgrims enjoy a good meal. At the edge of the *falaise* is a large cross; down below, the fishing-boats are returning, and the women with their baskets are waiting to carry the fish ashore. While we stood watching them, an old man drew near and told us that, about seventy years ago, when he was but a lad, he, with a number of fishermen, had gone out; their boats were seized by an English cruiser. The capture being disapproved by the English authorities, orders were given to send the men back to their town; but all communication being forbidden between the shore and the bark that conveyed them, it was found very difficult to disembark them. Two of the fishermen, however, were sent off in a boat to announce at Honfleur

XUM



ST. STEPHEN'S, OR THE ABBAYE AUX HOMMES, CAEN, FOUNDED BY WILLIAM THE CONQUEROR.

that to get back the captives it was only necessary to send to the vessel, which was then lying in the roadstead. The intrepid women of Honfleur, disregarding regulations, military and civil, against any communication with the English, took the first boats they found and went to the rescue of their husbands and brothers. But the flotilla of the liberators was seized by vessels which had been sent out from Havre to get the men, and it was only after three days' captivity that those brave women were allowed to return to their homes.

We started on the Etretat diligence, which leaves Place du Marché de Notre Dame, Havre, at seven in the morning. Our five horses soon drew us up the hill and out on the level country, where a long, white line of dusty road wanders amid green meadows and waving seas of young grain ; or by orchards, where the trees and ground are white with apple-bloom, and old stone farmhouses peep out from the thick foliage. Patches of yellow colza relieve the intense green which stretches away to the blue horizon, unbroken by hedge or fence. Once in a while we pass windmills—records of the past—swinging their arms in the morning wind.

I could scarcely believe we had done seven leagues, but there, in front, were the tall poplars which stand like so many sentries on guard at every French village.

We were just in time to witness the blessing of the ocean. The procession of priests—the boys in scarlet robes and white surplices, carrying candles and banners, and the girls in white—was on its way from the church to the shore. The sea was in one of its wild humors ; white-crested waves washing up in foamy breakers, rocking the little boats that lay on its surface. The deep tones of the clergyman rose in a benediction above the roar of the water, as he blessed it, for the sake of the toilers who gain from it their daily bread. A lull came across the waters, and, between us and dark, threatening clouds, a rainbow flung its arch of brilliant hues like the covenant of old.

Etretat is a very fashionable bathing-resort in Summer, numbering upward of 4,000 Parisian and American visitors. It has none of the quaint irregularity and picturesqueness of old French villages. Nearly all the houses are new brick structures, with nothing to smooth down the rough corners, and until the Summer visitors arrive it is melancholy enough. But along the shore every rock and crevice has its history and legend. September 2d, 1884, witnessed a weird scene on the beach at the foot of the Falaise d'Amont. An Indian prince, Rajah-Bapa-Sahib-Khauderto-Ghatgay, traveling with his suite through the south of Europe, fled from the cholera to Etretat, where in a very short time another malady attacked him, which proved fatal. According to the Hindoo creed all of high degree must be cremated. Permission having been obtained from the mayor of the town and the prefect of the department, preparations were made for the ceremony. At two in the morning the procession issued from the house. The body, covered with a white pall, was borne on the shoulders of six Hindoos to the shore, where layers of wood and shavings were ready to receive it. The body was then covered with hay and shavings, which were ignited. It burned until 6 A.M., when the ashes were gathered. One third was thrown to the sea, another to the air, and the rest placed in an urn, to be taken back to India.

The Casino and many of the hotels face the raised graveled promenade, while lower down on the beach the boats, with broom-thatched roofs, in which the fishermen keep their nets and other tackle, give a rather primitive appearance to the shore. Up on the heights is the Calvary, without which no French village would be complete.

At four in the afternoon the beach, the streets and the "place" are alive with pleasure-seekers and merry-makers, for then commence the amusements of the day. All around the "place," which is in the centre of the town, were booths filled with every imaginable nick-nack; also the gypsy houses on wheels, where fortune-tellers were ready to disclose to you the future. Down in a corner was the never-failing punchinello, which drew screams of delight from young and old.

The sun had sunk below the sea, and the warm tints of the afterglow still rested on the land, as we turned homeward. Lights were in the farmhouse-windows as we passed, and the milkmaids were busy with the cows. Onward we rolled to the music of gay French *chansons*, and the jingling of the horses' bells, arriving at the Place du Marché at 10 P.M., having done the twenty-one miles in two hours and a quarter.

Early of a warm June morning we are off from the Grand Quay of Havre to take the boat for Caen. Out past the lighthouses, out into a smooth sea, dotted here and there with fishing-boats and large steamers lying at anchor waiting for high tide to cross the bar.

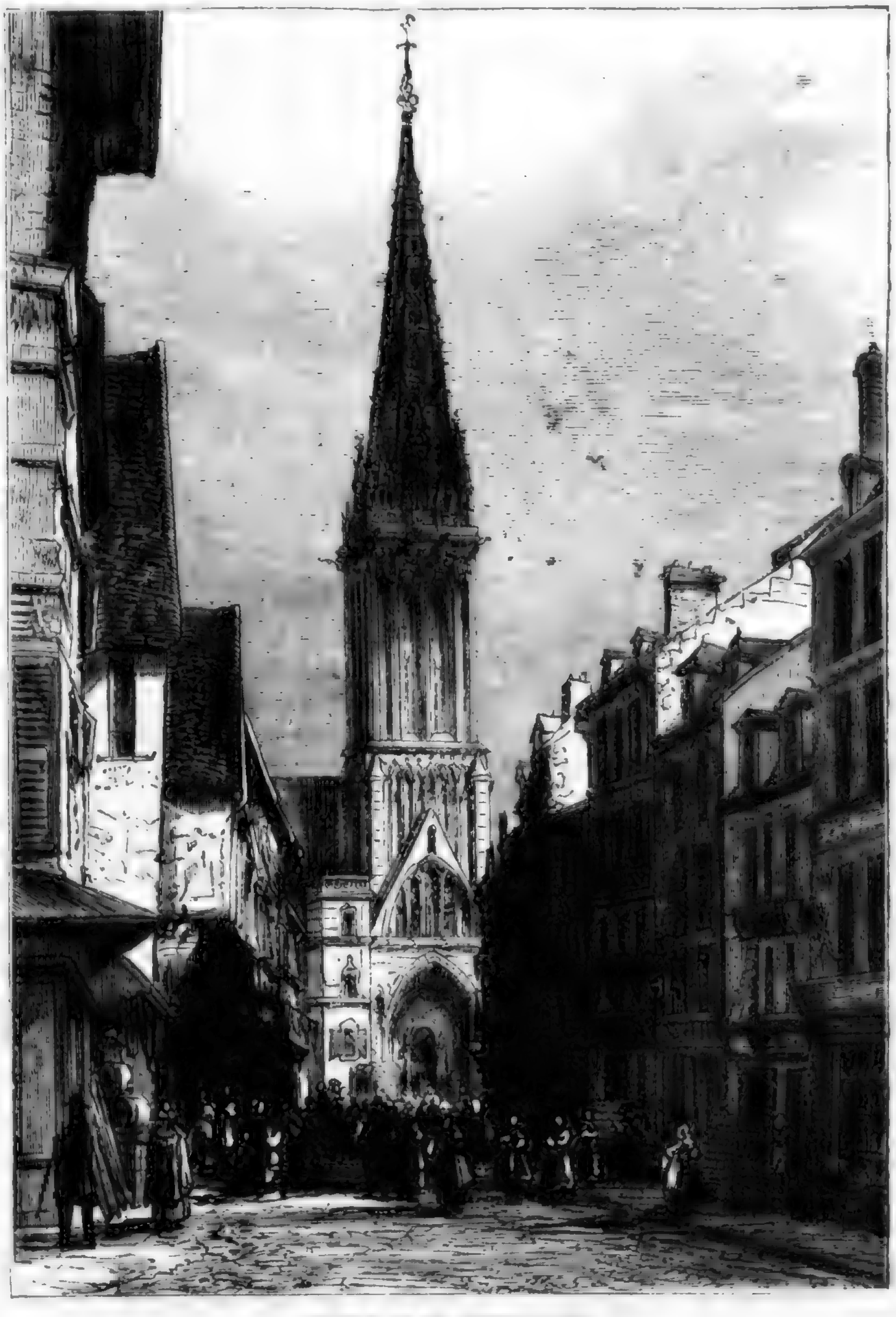
An hour and a half, and we enter the shallow-mouthed Orne. For some distance the soundings have to be taken. The sailor brings his long pole, marked with different colors, according to the number of feet. Every two minutes he plunges it over the side of the boat, calls out the depth of the water, "Eleven feet," "Twelve feet," "Ten feet," "Eight feet," "Nine feet," "Seven feet," "Twelve feet." We were again in deep water *en route*, and the vessel steams up again.

The river is very narrow. On one side is a towpath, which is shaded all the way with poplars, broken only here and there by orchards. On the other side the meadows stretch away as far as the eye can reach, or until they meet a patch of wood, from which a church-spire looms up, giving token of a hamlet hidden behind. Our paddles stir the water into miniature waves, which wash up over the banks and sprinkle the dusty pathway, bending the tall reeds on its way; while on the other side the ground is level with the river, the water, meeting no obstacle, washes far in, sometimes disturbing the cows that are napping in the noonday sun. Half-way up the river is the bridge of Ranville, a large iron structure, supported by a stone pillar in the centre. It turns on a pivot worked by two men, and allows the boats to pass on either side. Further on we meet the little boats, sometimes a whole flotilla, laden with sand from the seashore. We have to slacken up to a snail's pace for fear of swamping the heavy-laden barges.

As we approach the town the river narrows, and the trees close in on each side, making a grateful shade. Soon the spires of the Church of St. Etienne become visible, towering above all others, and in ten minutes we are standing on the wharf waiting for our luggage.

Caen is a bright, clean town, with good, well-paved streets. The Place de la République, formerly Place Louis XIV., is exquisitely laid out in flower-beds, and the Places des Marchés are most picturesque and lively with the stalls and tables, and the continual stream of conversation carried on by the venders, either enumerating the quality or the variety of articles for sale, or else announcing the news of the day to each other, their dress adding not a little to the varying picture.

Caen is filled with magnificent old churches, the Trinity and St. Sauveur being the richest in carving. St. Etienne, the Abbaye aux Hommes, is the oldest, founded



CHURCH OF ST. PIERRE, CAEN.

by William the Conqueror. Hither, in 1087, the body of that king was brought by the brave and faithful Herlewin, the only one who did not abandon the despoiled remains of the Conqueror at Rouen.

Peeping through the archways and into the courtyards, as you wander through the town, you get glimpses of the ancient splendor and beauty of the houses before they were disfigured for business purposes.

The weeks passed quickly in the sleepy little village of La Déliverante, nine miles from Caen ; going along the stretch of dusty, shadeless road every day to the sea for our bath ; spending the rest of the time either in the little booths which surround the church, bargaining for souvenirs, for which we were asked about five times their value, ending generally in our carrying them off victoriously at our own price, or we would go to the cottages to watch the lace-making. In many we saw the little children, who ought still to be at play, with the cushion on their knees, helping the mother earn the daily bread of the household.

We visited an old chateau which in feudal times had been a stronghold. Dungeons, dark and noisome, formed the foundations. I can imagine the unfortunate prisoners peering from between the bars out on the sunny land. The years that have passed have changed nothing in its external appearance ; but inside everything speaks of wealth and refinement ; broad, polished floors covered with soft skins ; richly carved old oak furniture ; high chimney-pieces, which support Henri II. and Louis XIV. ornaments ; while every fireplace had handsome andirons and its brass *garde-feu*. Outside, rose-trees creep up the walls, and nod their blossoms through the open windows. A little distance from the house is an old tower, with an opening near the summit, where many a prisoner has stepped through to his last account, his body swinging until the kites and hawks left nothing but the bones and ligaments. Now, ivy covers the old ruin, and the owl builds her nest and brings up her little ones, nothing disturbing them unless when a stone falls, as they will while the progress of decay goes on.

Toward the middle of July I was invited by one of the peasant women of the village, Madame B——, to visit, with her, some of her relations, farmers in the interior. A glorious Summer evening found us seated on the top of the diligence which leaves Caen every day for Viller, a village eighteen miles distant ; there the brother of madame would meet us with his horse and wagon.

Five o'clock chimed from the gray pile of St. Etienne as we turned out of the Rue St. Pierre. We halted at several villages *en route*, to let down passengers ; and by eight o'clock we had accomplished our six *lieux*.

Viller is only a small village, consisting of one street, at the end of which is a quaint stone church. It also boasts of quite a good inn, where we stopped for coffee and a half-hour's rest. We were hungry enough for dinner, having eaten nothing since noon ; but we contented ourselves with coffee, and reserved our appetites for the home meal.

It was that witching hour between *chien et loup* when we started for our destination, Mesnil-Auzouf, sixteen miles distant. What a vagabond gypsy party we were. We had now fairly left paved streets behind, and everything connected with city life ; there were no more shrines to venerate, nothing but the blue vault above. The very air, laden with the rich perfumes of earth, wooed us to a life of freedom, and we were all too ready to respond. The crescent moon hung low in the heavens, the stars came slowly out, one by one, as if reluctant to break through the gloaming. The glow-worms danced and sparkled in the grasses, and the black bat flitted overhead. On, on we went, mile after mile, past villages and hamlets, where not a light betrays the presence of an inhabitant ; on, while the moon goes down behind the hills, and the trees assume weird shapes in the darkness, and the Milky Way stretches across the heavens. At last we turned off the main road ; we had still three kilometres to go, at the end of which we entered a rugged, unkept road, the trees meeting over our heads. The barking of a dog proclaimed us "at home." We turned through the gate, a door was opened and the light of a lantern guided us to the house.

We entered. The room was spacious, fully forty feet square, with a high ceiling, a large fireplace filled with burning logs and sticks ; a gypsy-pot hung by a chain from the centre of the chimney, giving out a strong, savory odor of soup.

But to give a description of the room, which was kitchen, dining-room and bedroom all combined. The floor was the bare earth, which the heat from the fire and the walking had hardened to a certain degree. At the far side of the room, facing the window, was a handsomely carved old oak wardrobe, the linen-closet of the family ; at either side were beds—one used by the father and mother, the other by the two elder sons. (The family consisted of eight olive branches, all sons.) There, facing the fireplace, was the high, old-fashioned clock, which chimed midnight as we entered, and repeats the hour two minutes after for fear it might not have been heard ; at each side were the dresser and cupboard. Lastly, across the window, was the table, a wooden bench running along the wall on one side, and chairs on the other. A small oil-lamp burned on the table, and another hung from the chimneypiece. No cloth was set for supper. We each took our plate of soup, which was made of vegetables only. A large loaf, about two feet long, was placed on the table, from which chunks were cut when needed. It was dry and close, with a thick crust and without salt — altogether unpalatable. Our repast concluded with boiled eggs and milk. At this moment, like the Egyptians, I longed after the flesh-pots I had left behind.

I was glad when the "Good-nights" were said and we were shown to our room, which was on the opposite side of the little hall, and resembling the other in almost every particular. Two of the small children occupied one bed ; the other boys, dislodged by our arrival, betook themselves up-stairs to the hayloft ; for the family was contented with but two rooms, and this is a well-to-do farmer's.

But it was too late to make further observations. The bed was soft, and although the linen was of the coarsest, I was too sleepy to quarrel with it.

The crowing of the cock at daybreak awoke me, and I found that the day had commenced for the inmates. The boys were hurrying off ; one with the cows to the meadows, another to his plow, and so on, leaving only the younger ones at home. I watched through the uncurtained window the sun as it crept higher and higher, throwing its rosy tints across the sky and arousing all animal life, the birds chirped and twittered, and from the fields came the morning salutations of the calves.

On rising, I noticed what I had been too tired to do the night before, that there were no toilet arrangements whatsoever, not a basin—the house did not possess one—the family performing their morning ablutions at the pump in front of the house. A six-inch mirror, suspended at the window, was all that represented a dressing-table. So life for the next two or three weeks would be "*à la guerre comme à la guerre.*"

I was glad to escape outdoors while breakfast was in progress of cooking, and breathe the dew-freshened morning air, odorous with hawthorn and chestnut.

The house, a solid stone building, the walls two feet thick, standing on raised ground, commanded a magnificent view for miles of hill and dale and wood, all clothed in the richest green. It was a rough spot just here, not even a pathway to the gate—only that made by the wagon-wheels when the ground had been wet and soft; large, loose stones lay about, and bits of rock projected in different places. A few yards from the door was the duck-pond, and now a number of geese and some tiny goslings were enjoying their morning bath. Down at the meadow-bars stood the calves awaiting their morning meal and sucking each other's ears *en attendant*, and two handsome little foals were making all possible use of their long legs. Yonder, in the orchard, is a stately white turkey with her brood of eighteen little ones, while countless chickens were gathering the "early worm." Two little puppies came out of the kennel, barking in their contentment, thus joining in the morning hymn of praise.

By degrees the family assembled in the house, all hungry, for it was eight o'clock. Breakfast was served in somewhat the same style as supper the previous night. Glasses and cider were placed on the table; then the boys took it in turn to fry some galette de sarasin, which constituted the breakfast. But what was my surprise, on tasting it, to find it was but the buckwheat cake so dear to all Americans.

The morning meal, as one can imagine, was quickly over, and we prepared to make the tour of the farm.

The outhouses are built of stone, and in different parts of the grounds, at quite a distance from each other, so that if a fire occurs in one there would be no danger to the others.

Our first visit was to the bakehouse, which stood in a corner of the orchard near the house. The eldest son was the baker. As we entered he was kneading a large piece of dough; but the work was done with the feet, he wearing stockings of a very thick material, which reached far above the knees.

The farm is a rich one, comprising fields, acres large, of buckwheat, corn and oats, and meadows, where long grass stood ready for the second time for the mowers. The meadows in some places are separated by narrow lanes; through some a stream of water flows. The banks are high on each side. We followed one of the lanes. It led up the hill to another farmhouse. We were met with a welcome, and immediately invited to partake of the usual refreshments offered here, black coffee, calvados—which is a very pure liquor distilled from apples—and tartine de pain. The house in its interior was just a repetition of the one at which I was staying, except that it was neater in its arrangements. It had the same high linen press, the clock reaching to the ceiling, and the bed in exactly the same place. Indeed, I found every farmhouse that I visited, and that was not a few, to be a fac-simile of the other, and all the women dressed in the same gray stuff, which seemed cut from the same piece, and wearing, for everday use, the white knitted cap, which narrows off to a point with a tassel, reserving the muslin or lace one for going to town or church. Although all Catholic, yet not in one house did I see the picture or image of the Virgin or of Saints, a thing which surprised me very much. But the French peasant will spend no money that is not absolutely necessary to his daily wants.

One of the rooms of this house was arranged as a store, where we found all kinds of earthenware, from pots to cups. For a few *sous* I purchased a large pitcher, black and glazed, which is used everywhere for holding the cider, also other souvenirs, which, though of the coarsest clay, were to us precious. Laden with our treasures we turned homeward, and found dinner was awaiting us. It consisted of soup, like the previous evening, stewed rabbit, boiled chicken, pigeon and salad. Although no pretension was made at arranging the table, yet everything was served in courses, ending with black coffee and calvados.

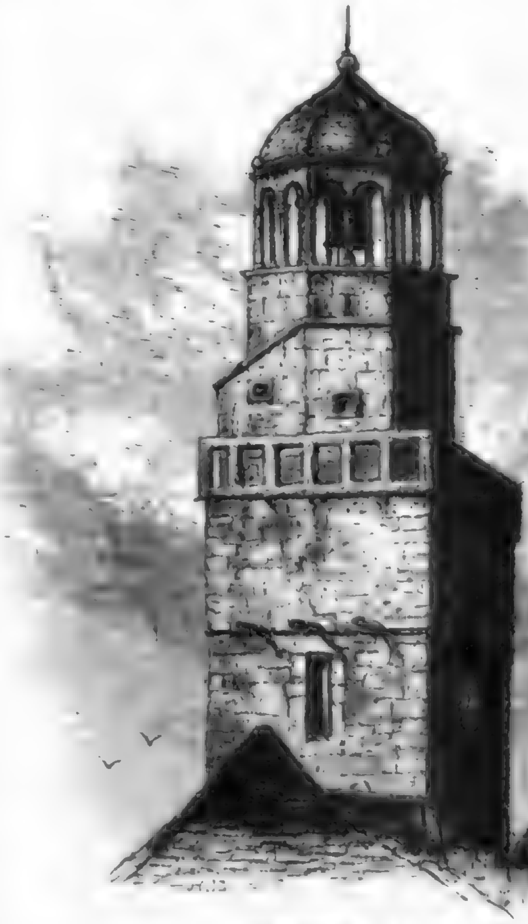
And now comes a lull in the day's work. The boys are either taking a nap in the hay-barn or else performing some light duties. What a unity and concord prevail in the daily life here. Not once did I hear an angry or impatient word or answer; but at the same time those boys were boys, full of life and fun. Irish hospitality is proverbial, but I think the warm-hearted hospitality of the French peasant might also pass into a proverb. I was not told to "make myself at home" and to "excuse," etc., nor was there any allusion to my being a stranger; on the contrary, I was received with a hearty kiss of welcome (or rather two, for the French always kiss on each cheek) by all the family, and then and there their home was mine, and everything connected with it at my disposition. We came and went at our will. Nor were there any Bluebeard's closets we might not penetrate. Every evening was devoted to driving—coming home, sometimes, when the stars were beginning to appear. The supper was a movable feast, so we never felt the least compunction as to the hour of our return.

Letters would come occasionally from the second son, who was away doing his military service (very much against his will), telling of camp life under the burning suns of Africa, and of the longing for home. The letters always ended, "*Votre fils, qui est malgré lui un soldat.*" The poor mother's eyes would fill with tears, and she would hurl maledictory epithets against the law that took her boys one after another. But a pleasant letter came one day—it was an invitation to a wedding. Madame M——'s niece was to be married, and we were all invited. What a state of excitement the house was thrown into; all the boys vowed they had "nothing to wear." Next day a piece of blue-gray cloth was brought from town (Caen), and a seamstress sent for (for in the country the men do not wear tailor-made clothes). The seamstress appeared. She was one of those monstrosities one meets with often in France and through the Continent. The cloth was measured and cut, and we all plied our needles with a determination that none should be missing from the marriage-feast. Our efforts were crowned with success, for six o'clock of a bright sunny morning, a week later, saw us all ready for the eighteen-mile drive to St. Charle de Percy, or, Mons Champ le Petit.

Arriving at the residence of the bride (a farmhouse), we found the wedding-party assembled and only awaiting our arrival to start for the church. The bride wore a dark-blue cashmere dress, a black jacket trimmed with lace, and around her prim little white cap was a wreath of orange-blossoms. The bridesmaids were dressed like the bride, while the men all wore the same blue-gray cloth pantaloons and dark bronzy-blue blouses, reaching almost to the knees. The groom and his four best men had each a large, white silk handkerchief pinned cornerwise to the right shoulder, hanging in front. Two-and-two they started off, taking a short cut through the orchards and lanes to the church, where, as soon as the

XUM

party appeared, the bells rang a merry peal. All took seats in the pews, and the priest, accompanied by the assistant, advanced to the centre of the nave, calling upon Henri —— and Alphonsine —— to come forward. Standing in the centre of the church, the marriage service was read, and the answers given which made them man and wife. They then advanced up to the altar-rails, taking their places at the *priedieu* arranged for them. Mass was said, after which we all filed into the vestry to sign the registry. I sometimes wonder if I shall ever be called to hold faith to the signature I left in that little church amongst the hills so many thousand miles away! We returned as we had come, two-and-two, the bridegroom walking with his mother-in-law, the bride escorted by an old friend of the family. At the gate of the church was spread a table with wine and cake, and as each couple passed they drank to the health of the newly married.



CLOCK-TOWER AT VIRE.

Arriving at the house, we found breakfast laid under a long tent, the guests numbering nearly seventy persons. The bride, or as she was now called, the *bru*, sat at the head of the table; the groom and best men taking the white handkerchiefs from their shoulders, fastened them to the canvas behind the bride; the flowers she received were arranged likewise, forming quite a pretty picture. The breakfast passed merrily; and certainly a better prepared one I have never eaten. The toasts and songs kept us at table until a late hour. Then dancing commenced on the greensward to the music of the violin. It was the old-fashioned quadrille, danced to the slow, stately steps of the minuet. At midnight we again repaired to the tent for supper. It was now the time when, according to old custom, the *bru's* garter must be obtained by one of the groomsmen. It is cut into as many pieces as there are unmarried girls, who treasure it and dream on it the first night after the wedding. Dancing was recommenced with fresh vigor, and kept up until coffee was served, at a little before seven o'clock, after which all repaired to the church to attend Mass. The day passed as the other, with dancing and feasting, and it was not until sunrise that the guests, with many wishes to the young couple, commenced to disperse.

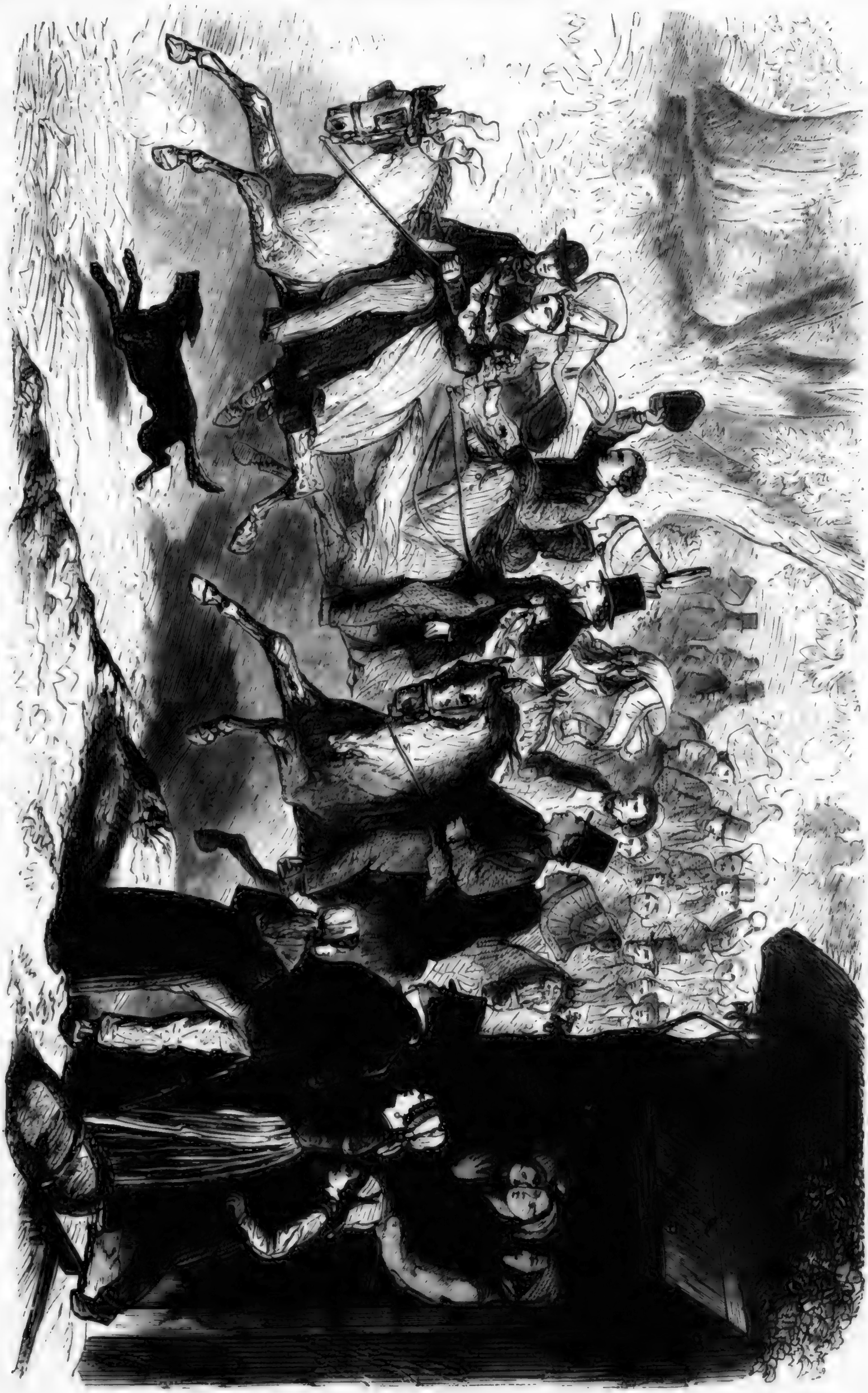
Once more we were seated behind our fast Normandy horses, *en route* for Vire, which, strictly speaking, is the last town in Lower Normandy. We drew up at the Hotel de la Ste. Vierge, which is on the principal street. It is a quaint old place, standing a little back from the street. A flight of steps leads up to the porched entrance, which is surmounted by a statue of their *patronne* in brilliantly painted robes. Inside, everything was of the old style; handsomely carved Louis XIV. furniture, a *garniture de cheminée* of Henri II., floors polished to such an extent that they renewed in us a desire for "just one more dance" of the early morning. Madame, our landlady, in an old-fashioned, towering Norman lace cap, and short but ample skirts, came with us to our room to see in person to our comforts. Everything was in order; the linen and draperies of the beds and windows were of the whitest. She threw open the *persiennes*, then bustled off, returning in a few minutes with a large bowl filled with dark velvety wallflowers.

"Mesdames, nous prendrons une tasse de café, avec la goutte, n'est-ce pas, mesdames?"

We were glad of some coffee after our long drive, and it was still two hours before breakfast. She reappeared very soon with a salver bearing two small, delicately painted cups, a silver coffee-pot, a diminutive carafon of clear, golden calvados, and two hot brioches. We were surely honored guests.

With much just pride she told us that the plateau and *pot à café* had descended to her from one of her ancestors who had served, centuries ago, the lords of the chateau now in ruins, which is so admirably described in Longfellow's "Vire." Later in the day she showed us a falcon's chain, which was also an heirloom. What wonderful stories those souvenirs could tell of the days of powder, puffs and patches; of royal hunts and court intrigues; reminiscences more interesting and strange than those of Ouida's "Puck."

Vire is perhaps the most primitive town in Normandy, retaining old manners, old customs, and old dress. The portes de la ville are in excellent preservation, the lower parts being mostly turned into shops, but without changing anything of their mediæval appearance. The "Tour de l'Horloge" was formerly the boundary of the city, but now the streets extend beyond it. In the lower part is a niche containing a statue, and underneath the prayer, "Marie Protége la Ville." We pass under the arch and follow the street, which brings us to the open place where stands the cathedral, a very old, richly carved structure. At a distance, on a height surrounded by grand old trees, is the "Donjon," all that remains of the chateau of the "Valley of the Vire." We wound our way up the rising to the walls of the *crénelé* tower. Down below the band was playing, the *allée* was thronged with promenaders, and courtships go on under the trees as in the days of yore. On the other side we look on the valley and the Vire, and the ruins of the mill. A little further away are the remains of a monastery, where good men fasted and prayed, and held the flesh in subjection, while those of the chateau were enjoying the good but "fleeting things" of this world. The principal streets



A WEDDING CAVALCADE IN NORMANDY.

are full of shops, with gayly decorated windows containing mostly nicknacks, and photographs of the town and its surroundings. We had a wide choice of souvenirs, from old vases of India to penholders made of porcupine quills, which are found in the neighboring woods. Some of the streets climb such steep hills that one would wonder how a horse and wagon could ever mount them. These are narrow, with small shops, whose wares are abundantly placed *en évidence* on the sidewalk. The centre of the town is given up to the Marché, to which the peasants bring their produce; or else peddle them in little donkey carts. We met one woman of an early morning, who, to save the four sous a day tax on a cart, had placed her baskets containing butter and eggs on either side of the donkey, she taking the seat in the centre. Such is the length to which French peasants will go to save a few centimes. Near the market-place is the "Tour St. Sauveur," the most picturesque of the fortifications; the niche in front contains a statue of the child Jesus holding the world in His hand. On the other side of the street from the Marché are old baronial residences, large iron gates open to paved courtyards which lead up to broad terraces, which are well shaded by fine old trees. The outskirts of the town are dotted with handsome villas and chateaus, where the Parisians come in the Summer and remain late into the Autumn.

FISH-HAWK AND FRIGATE-BIRD.

The distribution of land and water on the Gulf coast of Florida is very favorable to the existence of fish, and the flats and creeks swarm with life. Birds subsisting on fish diet also abound. Long lines of pelicans can be seen on every hand; armies of cranes stalk about; fish-hawks abound.

These latter are arboreal in their habits, nesting in the tops of the pine-trees, and rarely resting on the ground. For the most part they fish in the secluded creeks and inlets, hovering over the water and capturing their prey by suddenly diving upon it; but sometimes they fish in the open waters. While large, active-winged birds, they never soar. On first acquaintance their actions seemed inexplicable; while in the hidden creeks they uttered no cry and seemed to be masters of the gentle art; but in the open, allured thereto by a school of mullet, at the moment when they would seem eager for action and all alive with expectation, just as they might be swooping on a fish, they would emit a discordant, frightened, scream, and make for the shore with a haste so ill-advised as to seriously impede their progress. The shelter of the trees gained, the terror would subside. Desire for food would tempt the bird once more out, and again and again the same frantic performance was to be witnessed.

The reason was soon made evident. A fine specimen of the fish-hawk swooped on a fish, which soon left its element and swung aloft in the bird's talons. The hawk began its homeward journey. But now a newcomer appeared on the scene. A black creature, which seemed all wings, dropped from above and confronted the hawk, which at once let go its prey and uttered a scream so brimful of mortal terror as to excite one's pity. The hawk was not struck, and it made off with wild haste for shore. The intruder was a frigate-bird, which seized the dropped fish in its beak long ere the prey reached the water, and then, with a sweep of exquisite grace, on tense wings, fronting a mild breeze, the corsair was lifted half a mile into the air. A bite was taken from the fish by a wringing motion of the bird's head, which sent the carcass whirling. The morsel being swallowed, the bird, folding its wings tightly on its body, dropped swiftly after the fish, seized it, again swept upward, and then the performance was repeated till the meal was over.

In a personal contest for superiority on the ground of physical strength the frigate-bird, with its small legs and feet and its head and beak not stronger than the fish-hawk's, was no match for the latter; but sometimes the fish-hawk does not play its part as capturer of the prey desired by the frigate-bird, and several of these latter combine to cut off its retreat landward, swoop about it until the unfortunate victim loses its power of screaming, then of flight; down it falls at last exhausted into the waters of the Gulf; the demon birds still pursue it; with their miserable, puny feet they alight on it, and push it beneath the surface, continuing in one case to do this for over an hour, until the bird was dead. When the hawks captured fish they were not so treated—they were robbed, not killed. It would seem as if the existence of the fish-hawk as a species depended on their understanding this, and that now and then those that did not understand lost their lives in the struggle.

WAITING—A SONG.

By Fanny Forrester.

I am waiting, oh, my darling! in the gloaming,
As I waited in the gloaming long ago;
When the soft Spring breeze, through hawthorn branches roaming,
Waved their lovely fairy banners to and fro.
I am waiting, but my face is worn with sorrow,
And the gold has all departed from my hair;
Yet these faded cheeks will glow with joy to-morrow,
When my darling showers his tender kisses there.

I am waiting, but my eyes are dim with weeping,
Oh, my dearest, through long years of bitter pain;
They have lost their youthful light, while fondly keeping
All their loving, faithful watches still in vain.
Thou wilt think of all my weariness and sadness,
Looking down into their tearful depths, and then
They will shine with all the old-time love and gladness,
See thy well-loved face, and never weep again.

I am waiting, in my robe of snowy whiteness—
In that dear white robe my darling loved the best—
And a wild red rose, in all its glowing brightness,
I have twined within the kerchief o'er my breast.
I have placed a tiny cluster of white daisies
(Thou wilt love to see them nestling there, I know)
In the sun-kissed locks that won thy fondest praises
In that happy, happy springtime long ago.

Ah, my dearest, I am listening in the gloaming
To the welcome, welcome music of thy voice;
And the fragrant breeze, through hawthorn branches roaming,
Waves their fairy banners high, and shouts "Rejoice!"
Now my trembling hands are folded close in thine, love,
And my longing eyes behold thy face at last;
While I hear thee fondly whispering, "Ever mine, love,"
For the weary, weary waiting now is past!

HOW ANTONIO RICAURTE SAVED THE GUNS.

What the Fourth of July is for the United States of America, the Eleventh of November is for the United States of Colombia—a day of intense patriotism, fizzing rockets and awful waste of gunpowder. For it was on November 11th, 1811, that some gallant spirits—too true to their country to turn back at the frown of Spain, even though one of her kings had said, in his pride, "At

Spain's least movement the earth trembles"—met in the City of Carthagena, signed and issued to their countrymen an *Ácta de Independencia*, which was their Declaration of Independence.

This *Acta* spread like prairie-fire through the country. It enlisted, in addition to Simon Bolivar, men like Sucre, Paéz, Santander, Córdoba, Ricaurte, Jirardot, Deluyar, and others who filled up, with brave deeds, the annals of national valor.

One among these, Antonio Ricaurte, has come down to us to-day—a special type of those who sacrifice themselves for their country. This hero was young, not over twenty-eight years, was not high-ranked, signing a simple *capitan* after his name, and was not known out of Sante Fé de Bogotá, whence he had come to battle bravely and to die grandly.

The events with which Ricaurte is associated took place during the War of Independence of the Spanish American Colonies against the power of Spain.

The year was 1813, the month March, the battlefield San Mateo, near Carácas. The situation of the patriots of Venezuela was critical. The main point threatened by the Spaniards was the capital, but a lion stood in the path between them and Carácas. That lion was General Simon Bolivar, already being then talked of as the coming *Libertador.*

The royalists, two thousand infantry with five thousand cavalry, were commanded by General Bóves. A brave but unscrupulous soldier, Bóves was a fit leader of men who, though formidable in numbers, were undisciplined, and were kept together only by the hope of plunder. His forces were the terror of the peaceful inhabitants, and the atrocious butchery of Ocumare by his lieutenant, Rosete, in February, had added to the horror with which the campaign of 1813 had opened. To meet this large force—which, if unruly, had shown itself capable of good fighting—General Bolivar had only one thousand five hundred infantry and six hundred cavalry.

He had fortified himself as well as he was able at San Mateo, a village some forty miles from Carácas. The position was well-chosen, the village being situated in a plain, crowned on the north and south, by eminences.

On one of the heights was a house belonging to Bolivar, and near it, though further toward the east, extended the *ingenio*, or mill, which was one of his valuable patrimonial possessions.

Bolivar caused trenches to be dug, cutting the principal road to Victoria, which crossed the village of San Mateo and ran by the foot of the mill. His headquarters were in a street near the trenches, while a strong force guarded the ford of the River Aragua.

Bóves—a furious war-wolf—had the men, but he lacked artillery and ordnance. General Bolivar, who had more than he needed of both, had not the men, and it was in this that his main danger lay.

He had only on the 10th of the month sent General Montilla, with three hundred chosen troops, to the relief of Carácas, then threatened by Rosete, the butcher of Ocumare. This had left him with eighteen hundred men of all arms, against nearly four times that number.

He had already deposited the surplus of his artillery and ordnance supplies in the mill, with a guard of fifty men, commanded by Captain Antonio Ricaurte, a young officer in whose discretion and courage he had great confidence.

This is how matters stood. If General Bolivar could save his magazine and artillery from Bóves, who had none, he ought to succeed in driving the latter from the country, thus leaving his own army free to reinforce General Montilla at Carácas. If Bóves, at this time without a single field-gun, could once seize the guns stored at the mill, he would, with his great superiority in numbers, become master of the situation, annihilate the patriot army at San Mateo, and take Carácas at his ease.

Valencia, the heroic city, would not be able to resist him, and the fertile valleys of Aragua would lie helpless before him, a rich harvest for his thievish *Llaneros.*

These were the immediate certainties; but beyond these known results loomed up the unknown possibilities—the destruction of the patriot bands elsewhere, the States left defenseless, the death or capture of Bolivar, and the despair which would have paralyzed the republican councils from the Bay of Panama to the sources of the Amazon.

It was under these circumstances that Bóves, after repeated attacks upon various points of Bolivar's lines, becoming convinced that his forces would be gradually weakened, without any hope of ultimate success, finally decided to risk a general engagement.

To this he was moved equally by his own aversion to inactivity and the clamors of the wild *Llaneros*, brave in their numbers and chafing at delay.

In this new attack his objective point was to be the mill, and a stratagem was decided on to effect its capture. His spies had already reported that all the spare artillery and the ordnance were there, guarded by a small force. That point, therefore, represented his supreme necessity. His plan of battle was skillful as well as daring. It was, to detach a powerful column against the rear of the height on which was stationed the left flank of the enemy's force, to turn it, and then to advance swiftly upon the mill, left by this sudden movement at his mercy, while Bóves himself, at the head of his other troops, was to divert the attention of the patriots by a violent assault upon the fortifications on the plain of San Mateo.

This plan was followed to the letter. The day was the 25th of March. Bóves attacked the trenches furiously. His known courage animated the valor of his followers to recklessness. They poured themselves, a stream of men, against the defenses.

Behind the parapet Bolivar stood calm and confident in the precautions he had taken. The royalists had already charged repeatedly, but to be as often driven back with heavy loss by the well-directed fire from the patriot artillery.

The *Llaneros* swept again and again to the very foot of the fortifications, but only to fall by the side of those comrades over whose dead bodies they had advanced to the charge.

But in the very heat of the battle, while the ranks of the assaulting force were thus being decimated, and while the whole attention of the patriots was directed to the defense at this point, the surprise column had already, in silence, ascended the height in the rear of the left flank of the small army, had routed the thin line, and was now for the first time seen descending with an evident design of seizing the mill.

Bolivar's keen eye at once saw the new danger. He recognized how fatal would be the success of the enemy now—not only to himself, but to that proud capital left with all its wealth helpless but for him and for what measures he could now adopt to save her. There seemed nothing else for him to do than await the blow which had not been expected and against which no provision could have been made.

Fifty men, were they as bold as those of Thermopylæ, could have offered no effective resistance from an open house and exposed position to the thousands who now, fully displayed to view, were seen pressing from the rear at double-quick.

Bóves, triumphant in the success of his stratagem, became more and more eager in his assaults. It mattered little to him how many men he would lose at the trenches, if he only succeeded in gaining the mill.

General Bolivar, looking upon this movement, not venturing to doubt its success, and foreseeing all the consequences, was thrown (says the Granadan historian, José Manuel Restrepo) "into a horrible uncertainty for several moments."

But what had Ricaurte been doing all this time?

He had watched almost from its incipiency the movement by which the Spaniards had turned the patriot left flank. He had probably even seen their destination before General Bolivar himself, and his measures were at once taken.

It is related that, calling his comrades around him, he told them that it would be of no use to defend the mill — that they were a mere handful, while the enemy were to be counted by tens of hundreds, and that it was better that they should leave at once.

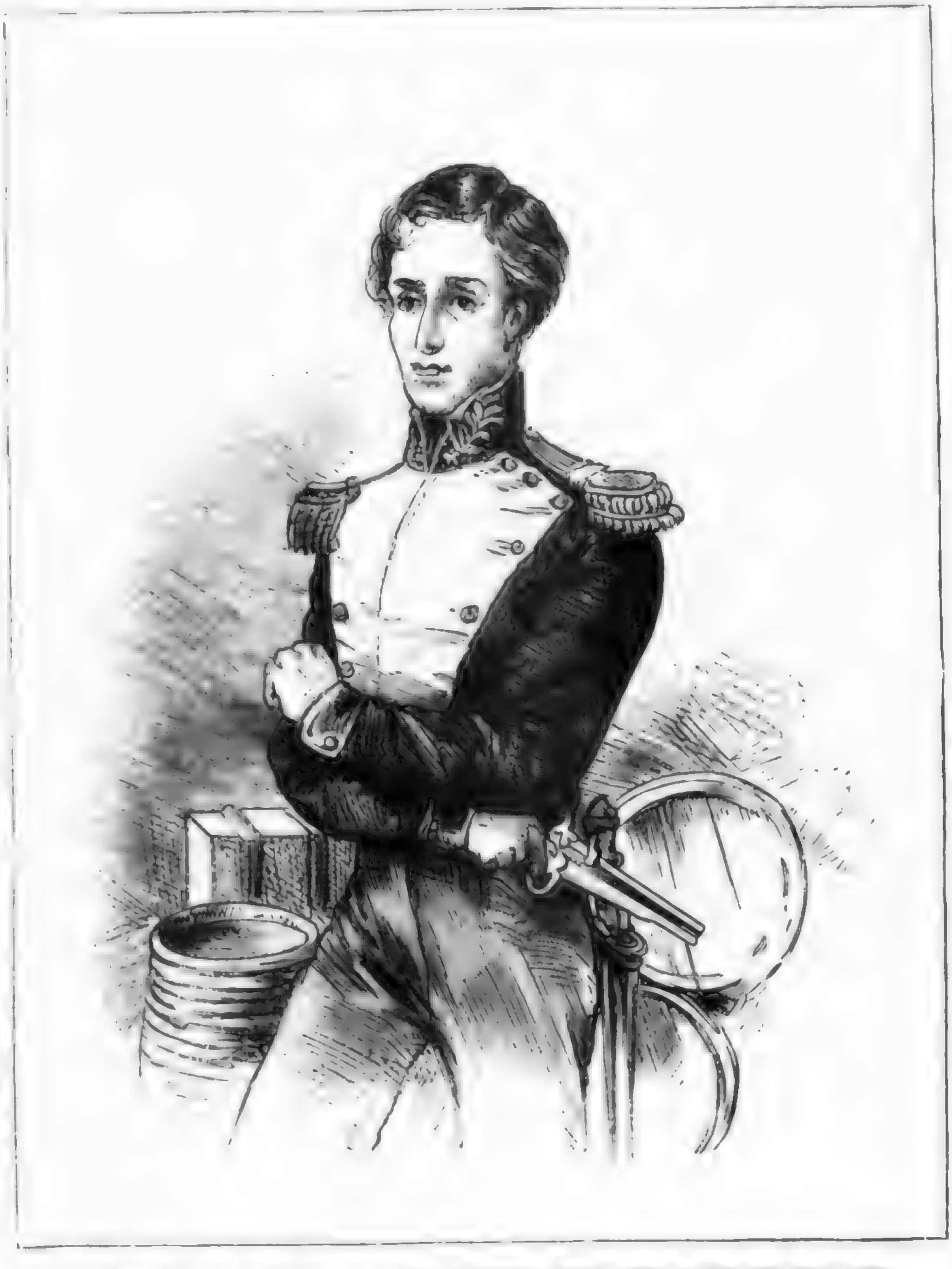
"I have no right to expose you," he said. "You have time enough to escape."

"And what are *you* going to do, *mi capitan?*" asked one of the men.

"I will stay behind only for a few minutes," replied Ricaurte.

"But if we go without you, what shall we say to the general?"

"Tell him," replied Ricaurte, with kindling eyes, "that I shall save the guns from the enemy. Go, my friends," he added, in a gentler tone; "I shall not be long here."



RICAURTE, IN THE MILL OF SAN MATEO, AWAITING THE APPROACH OF THE ROYALISTS.

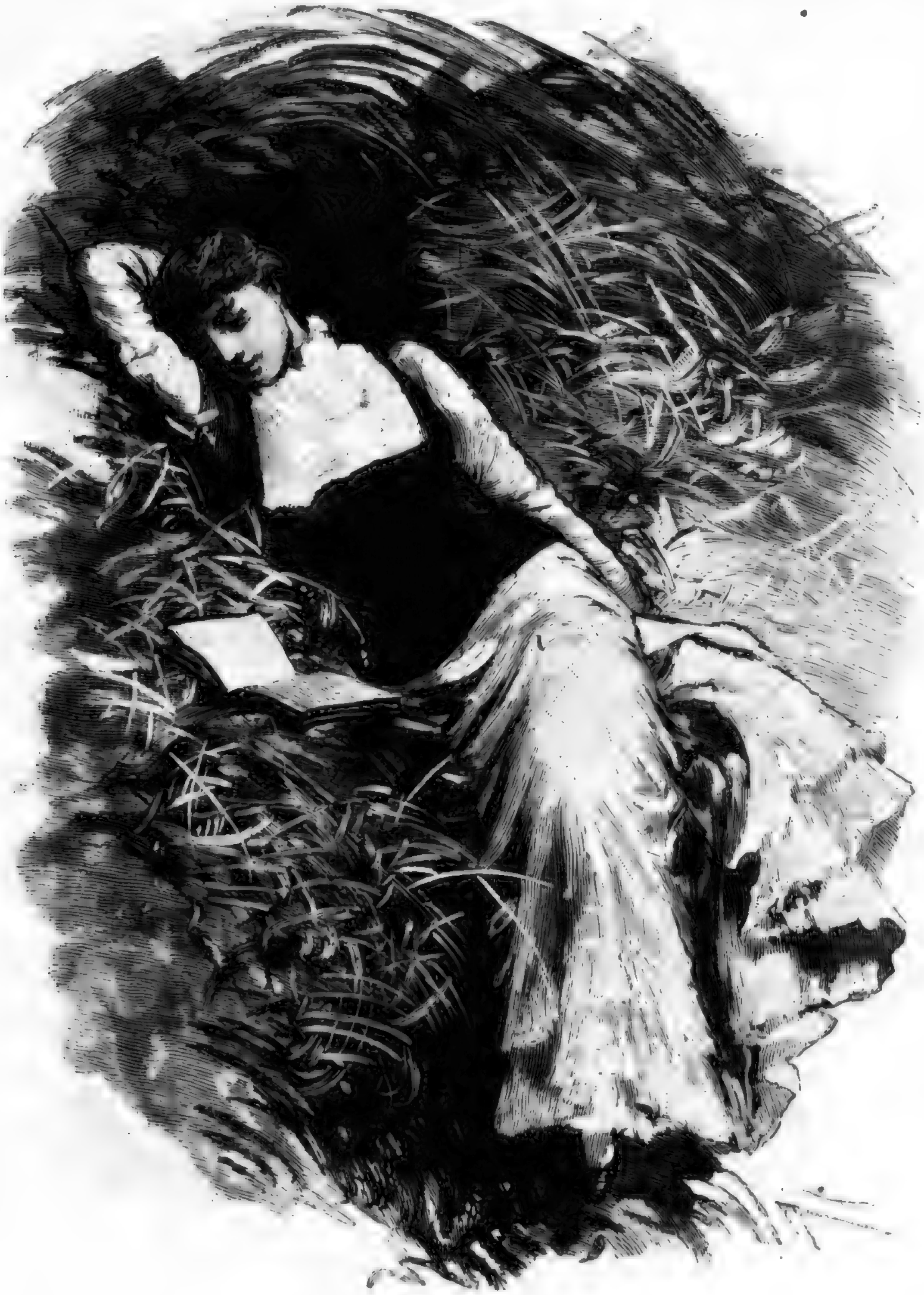
His comrades did not know it, but Ricaurte had spoken the truth. He was not long there. Here the fight has been brought to the very moment of sacrifice.

At this point let us borrow the frigid voice with which history recounts the deeds of her martyrs. It is the same historian, Restrepo, who gives us the story:

"The young Granadan, Captain Antonio Ricaurte, seeing that the enemy were certain to capture the depot, and that the seizure of the park of artillery would give them the victory, proceeded to place the troops which he commanded in safety, they defiling by his orders toward the plain, while he, with a lighted match in his hand, waited the approach of the royalists. When they had come near enough he set fire to the powder, and the magazine exploded with a terrible noise. The enemy suffered fearful havoc, the frightened remnants of the column fled, and Ricaurte, sacrificing himself for his country, saved the republican army from total destruction. If Bóves had possessed himself of those stores he would have exterminated the patriots in San Mateo. Thus Ricaurte deserves an eternal name for so sublime a sacrifice." The explosion of the magazine, heard and understood over the whole field, tended to dishearten the royalists, while in equal degree it encouraged the patriots.

At this critical moment Bolivar, sending away his horse, headed a charge on foot. This onslaught was irresistible; the Spaniards, after a feeble resistance, fled in all directions, the battle was over, and Carácas was saved.

A NOBLE part of every true life is to learn to undo what has been wrongly or thoughtlessly done.



A COZY RETREAT.

DAUGHTERS OF CAIN.

BY

ETTA W. PIERCE.

CHAPTER XXVIII.—(CONTINUED).

ABEL LISPENARD plunged into a path dark with trees, passed Lilian's garden, crossed a lawn, and avoiding the main entrance of the house, came to a side door, which was locked. He drew a key from his pocket, and leaving the dog Cossack outside as a sentinel, he darted into the house, and Gilbert Vye with him.

"What I do is not for your sake, but for your daughter's," he said. "My servants must not see us. For your life make no sound!"

He snatched a silver lamp from the hand of a figure in bronze that stood just inside the door, and with more rapidity than might have been expected from his short legs, mounted a tufted stair, entered a handsome corridor, and at last paused, with the fugitive, before that holiest of holies, the long-closed rooms of Lilian Lispenard. Was there no struggle in his heart as he unlocked that sacred door? Ay, verily! But he went in, and Gilbert Vye after him.

"Shelter me, Mr. Lispenard," said the outlaw, "till the hue and cry at Rookwood is over, and I will give you no further trouble."

"If I do that," answered Lispenard, sternly, as he put the silver lamp down on the table, and turned to the hunted, haggard man, the degenerate son of an ancient race, pursued now by his own kin, "you must swear by everything you hold dear to quit your old life; to abandon, from this hour, both the name and the character of Black Dave; to repent of your past misdeeds, and become again an honest man."

Over the back of a chair in the centre of the floor trailed a priceless Indian shawl. Gilbert Vye stumbled blindly in its rich folds, then recovered himself, and smiled down at the dwarf in a ghastly way.

"My dear sir, you think, doubtless, that you are asking an easy thing. However, I have no choice. Yes, I will swear to do all that, and as much more as you please!"

"Understand me!" said Lispenard; "I know your crimes, Gilbert Vye, and I abhor them! You justly deserve the fate that threatens you. Nevertheless, I give you my word that you are safe here, that I will do my utmost to save you from your nephew, not that I feel the slightest sympathy for you, not that I wish to shield you from punishment; but solely for the sake of another person, who will suffer if you receive your just deserts."

Up went Gilbert Vye's shoulders.

"Greatly obliged, Mr. Lispenard, I'm sure! You have me at an immense disadvantage just now, so I shall take care not to be angry with you. It is plain that I made a bad move when I came East. How unfortunate, too, that my daughter's lover should possess so good a memory! I hope to Heaven he will not know that I am hiding here!"

"Captain Shirlaw has left the Dale," answered Lispenard, shortly.

"Ha!"

"And this room is never visited by any member of my household—I alone have the key to it."

"Good."

In a sort of stern wonder, not unmixed with positive aversion, Lispenard recoiled from his guest.

"You are by birth a Vye," he said, "and by breeding a gentleman. How could you fall so low?—how could you become the creature you now are?"

"It is a long story," answered Gilbert Vye, with perfect indifference. "I had lost everything, and necessity knows no law. It was imperative that I should have money, so I took it, *sans cérémonie*. Remember, I had two young daughters to provide for, and, 'pon my soul! I meant to give up the business when they should be settled in life, and return East and become the most respectable of all the respectable Vyes. But my plans have miscarried." His eyes fell suddenly on the wonderful portrait of Lilian Lispenard hanging above him on the wall. He snatched up the silver lamp that he might examine it closer. "Heaven above! what a strange resemblance!" he muttered. "Do you not see it?" turning, sharply, suspiciously on Lispenard.

"Resemblance—to whom?" demanded Lispenard.

"Look for yourself. You are blind!—you cannot recall the person who has a face like this? Then, perhaps, I had better not mention her!" putting the light coolly back upon the table.

Abel Lispenard could bear no more. The boudoir of his idolized, ill-fated sister changed to the hiding-place of a robber and murderer—it was too much! He went out quickly, locked the door behind him, put the key in his pocket and descended to the lower portion of the house.

He sat down to the piano in his luxurious music-room, and struck a few chords. In the midst of Donizetti's sweetest music, played as only this frog-man could play, steps crossed the terrace without. Cossack gave a warning bark, and a sharp ring at the bell followed.

He knew who his visitors were—knew their errand, but he went on playing brilliantly, breathlessly, absorbed, apparently, in his music. Presently a footman opened the door.

"A gentleman to see you sir," he announced, and then Abel Lispenard turned and saw Cyril Vye, with his eyeglass screwed in his eye, standing, like a smiling Mephistopheles, on the threshold of the music-room.

CHAPTER XXIX.

HONOR OR MIGNON?

"MUSIC hath charms to soothe the savage breast!" said the lawyer, airily. "Sorry to interrupt you, Mr. Lispenard."

Lispenard struck one long, wailing note, and pushed back from the instrument.

"To what am I indebted for this late visit?" he asked, glancing at the clock, which pointed to the wee sma' hours.

Cyril Vye stepped briskly into the apartment.

"There is trouble at Rookwood," he answered. "My Uncle Gilbert has suddenly disappeared—some temporary aberration of mind, doubtless. We are all greatly alarmed. I have friends outside who are aiding me to search for him. We feel almost certain that he has crossed the river to your grounds."

Abel Lispenard did not move an eyelash. Square and short of figure, pale and powerful of face, he stood under the clustered gas-jets and looked sternly at Cyril Vye.

"*Who* is alarmed—his daughter?"

"Luckily, no," replied Vye, lightly. Mignon is asleep. We do not care to annoy her with this matter to-night."

"Very considerate of you," sneered Lispenard. "Possibly your fears are groundless. Gilbert Vye may be indulging in one of the night gallops of which he is so fond. Why this solicitude over a few hours' absence?"

Cyril Vye smiled.

"My dear Lispenard, the horses are all in the stable, so he is *not* riding. I must find him at once. My friends have come to the Dale to-night expressly to make his acquaintance. *Can* you give us any information concerning him?"

"None," said Lispenard, sternly, decidedly.

Cyril Vye gnawed his lip.

"A boat was seen to put in to your landing-place a short time ago. Have your people been on the river to-night?"

"Yes, one of my servants, on an errand that does not concern you in the least."

"My uncle has a dual nature, and he lives, I may say, a dual life. He is also sharp—deuced sharp. It is quite likely that, unbeknown to you, he may be lurking, even now, about your premises." Then, as if disdaining further disguise, he broke out with a coarse oath. "He has fled from Rookwood fast enough. By Jove! he had good reasons to fly! Now, Lispenard, I must beg you, as the friend of honest men, and the foe of scoundrels, to permit my companions to search your house and grounds thoroughly."

Lispenard stepped calmly out into his hall. Two persons were waiting there, both well known to him.

"How are you, sheriff?" he said to the foremost. "You find me keeping late hours. You wish to search my house? I shall be glad to conduct you wherever you desire to go."

He began to throw back the doors near at hand, and with perfect alacrity to open all the nooks and corners of the sumptuous rooms on the ground floor. Then they ascended the stair. Cyril Vye never took his eyes off Lispenard. He knew that, however calm the dwarf might be in outward appearance, inwardly he was in a towering rage at this midnight invasion of his lordly home.

They went through all the upper apartments of the mansion—the guest-chambers, and even the quarters of the sleeping servants—but found no trace, no sign of Gilbert Vye. At last the party arrived at the closed rooms once occupied by poor Lilian Lispenard. The dwarf put one hand on the door of communication.

"The two apartments within," he said, "are sacred to the memory of my dead sister; neither you nor any other person can enter here!"

His face had suddenly grown white and rigid.

"It is not necessary for us to go in," said the sheriff, courteously. "We know Mr. Lispenard and his family history. He has only to assure us that the person we are looking for is not inside, and we shall be satisfied."

Which should conquer now—honor or Mignon? For her sake could he stoop, even to falsehood? For her sake would he forfeit his self-esteem, and sin against his own soul? Cyril Vye watched him sharply. There was a moment of blank silence, then in a firm voice Lispenard said to the sheriff:

"*There is no one inside that door!*"

They descended to the lawn. Lispenard called his men-servants to bring lanterns and aid in the search. From end to end of the shrubberies and gardens they went, along the river-bank, up and down, here, there and everywhere, but discovered no fugitive. Gilbert Vye was not to be found.

Gray and unreadable as stone, Abel Lispenard stood under the Autumn stars, and watched Cyril Vye and the officers depart.

"A thousand thanks for your assistance, Mr. Lispenard," said the sheriff.

Cyril Vye cast a queer look up to Lilian Lispenard's dark window, high in the tower. He made a mocking bow to the dwarf.

"Abel Lispenard, you have been one too many for me to-night," he said, and then they went away—went off across the garden, to the little jetty by the river, and Lispenard stood and listened, till their receding footsteps died away in the distance.

CHAPTER XXX.

BY THE RIVER.

All that night Mignon slept the sleep of youth and health and innocence, happily unconscious of everything that was passing around her. The sun was shining brightly when she awoke, and by her pillow she found Philip Vye's pale wife sitting, like a marble statue.

"Aunt Elinor!" cried Mignon, springing up on her pillow, in wonder; "how worn and anxious, and altogether ghostly you look!"

"Do I, my dear?" answered Elinor Vye, with a wan smile. "I came here to guard you. I feared you might be disturbed, and you were quite tired out with your journey, you know. Have you slept well?"

"Yes, indeed!" said Mignon, rising at once and proceeding to dress. "Why, it is positively nine o'clock! I dare say somebody is waiting for me below stairs—papa—or—or——"

"Captain Shirlaw?" prompted Elinor Vye, hurriedly; "no—neither, my dear. I have something to say to you, Mignon—you will not see your father this morning. He has been called suddenly away—I would rather be the first person to tell you this." Her voice unconsciously took a tone of distress. "Don't speak of him, either to your cousin Cyril or your uncle. We are two helpless women, made to be crushed by hands stronger than our own. Gilbert is gone. Let us say that he has been driven away by financial embarrassments—men do strange things under that name, you know. You must be very patient and wise, Mignon—you must not ask questions, and you must not fret."

Mignon looked at Aunt Elinor, aghast.

"Papa gone, and without a word to me!" she cried.

Even Elinor Vye could play the hypocrite when occasion required.

"My dear," she said, sweetly, "he has left you to me. *I* am now to take charge of you. Some time you will know all about the matter, but for the present, you must be silent, and trust those who love you. I have ordered breakfast in my little sitting-room, and in an hour the carriage will be at the door to take us to town. We will spend the day with the Berkelys. They have lately purchased a whole gallery of paintings which I know you will like to see."

Mignon felt as though she had received a cold *douche.* They sat down to a *tête-à-tête* breakfast, the girl in a brown study, Elinor Vye watching her anxiously. Mignon little dreamed of the fever of alarm and dread that was raging all the while in the heart of the meek woman. If only she could keep from her innocent young niece the knowledge of the truth!

"I will be very patient for papa's sake," said Mignon, after quite a long pause. "I will ask no questions, Aunt Elinor—it is enough that he has left me to you. I fear he spent a great deal of money in New York. He *would* gratify all my whims. Oh, I blame myself for it!"

"Poor child!" groaned Aunt Elinor; "blame yourself for nothing!—you are entirely innocent of this trouble."

They arose from the breakfast which neither had tasted, and made ready for a day in town.

"Before we start, Aunt Elinor," faltered Mignon, "let me go down to the garden. Captain Shirlaw will see me there, and he left so suddenly last night—do you not remember?—I am sure he will wish to offer explanations."

"Very well," replied Aunt Elinor, in blissful ignorance that Captain Shirlaw had been weighed in the balance and found wanting, "I will wait for you a half hour, my dear."

Mignon descended to the sunny garden. Rookwood was very quiet. She saw no one about, save the Scotch gardener, who was raking dead leaves from the walks. In a pensive mood she sauntered down to the river-bank. As she paused there, looking wistfully across the current, and wondering where her lover might be, a boat put out from the stone jetty, and not Shirlaw, but Abel Lispenard, scrambled over its side at the Rookwood landing-place.

"Captain Shirlaw left the Dale last night," he began, holding out a letter to Mignon. "He asked me to give you this."

With a blank face she took it, broke the seal and read these words:

> "Since you and I must suffer for the sins of others; since marriage between us is no longer possible, I must beg you to release me from my engagement. Circumstances beyond my control compel me to leave the Dale in haste, and also forbid me to return to it; but, rest assured, my respect and esteem will be yours always."

That was all. She was jilted. The paper fell from her powerless hand. She turned a white, changed face upon Lispenard.

"He is gone!" she gasped; "he will never come back!"

How strangely impotent a thing is human love! Abel Lispenard would have given his life for this girl, and yet he could not save her a single pang. His eyes glowed like an angry hawk's.

"Then forget him," he answered, harshly; "do not give him another thought. He is not worthy of you!"

At the frog-man she looked down with large, tearless eyes.

"They have all fled from me," she said, in a dull, dreary voice, that had neither life nor hope left in it—"sister, father, lover! I do not know what it means—I have tried to think, but I cannot. I am forsaken by one and all. There is no one now who cares for me in the least."

"Is there not?" he answered. "You are ungrateful. I know of a person who would die to serve you? Die, do I say? There are tests more severe than death—to stoop to falsehood, dishonor; to sin against all one's own ideas of right for your sake; to stand condemned before one's self, yet exulting in the abasement, since peace by such means has been purchased for you. Tell me, is not that a test of love?"

She looked blank, uncomprehending, like one who listens to idle tales.

"I do not understand you," she said, wearily, almost impatiently. "No one living would do such things for me, not even Aunt Elinor. To go without a word—that is very odd. Everybody behaves so strangely of late. I am frightened and perplexed by such hasty flittings, such unsatisfactory, unexplained conduct."

"Let nothing frighten or perplex you," replied Abel Lispenard, "even though you fail to adjust your understanding to certain recent events, Miss Vye. Have you seen your cousin Cyril this morning?"

"No."

"Nor your uncle?"

She shook her head. Her flower-like face had grown as white and cold as marble, her seal-brown eyes were heavy with unshed tears.

"I have seen no one but Aunt Elinor, and she insists upon taking me to town for the day. Oh, Mr. Lispenard," in a low, broken voice, "surely you can explain this mystery if you will. Did—did he cease to love me all in a moment?" Lispenard set his teeth.

"He saw your sister," he answered, bluntly, "and his unwelcome love drove her from Rookwood."

It was only half of the truth, but she found it enough. She gave a quick, sobbing cry.

"All is plain to me now," she faltered, bitterly. "What can he mean by saying that we must suffer for the sins of others?"

"Heaven only knows!" answered Lispenard, wildly. "He was probably beside himself. Do not give such absurd words a thought."

She leaned against the nearest tree, like a heart-broken dryad. Her arms fell to her side. Nothing could have been more pitiful than the bowed young figure standing thus, in its visiting-dress of silk and velvet, so sumptuous and so hopeless. Lispenard's heart swelled fiercely. There was silence for a space, then she lifted her head, as though pierced by some new pang.

"And my father," she said, appealing again to the frog-man; "pray, Mr. Lispenard, do you know anything about his sudden disappearance? Aunt Elinor forbade me to speak of him to my uncle or Cyril; but surely I may ask information of *you*—you, whom she esteems so highly. She is hiding something from me, and I am not a child, but a woman."

From the lover who had deserted her the girl's heart turned back to its earliest idol—her father.

"My dear Miss Vye," said Lispenard, steadily, "you can always rely upon your Aunt Elinor's good judgment. Would it comfort you in the least to know that your father is safe, quite safe?—that no harm has befallen him?"

"Comfort me? Yes, oh, yes!" she half sobbed.

"Then I give you my word that such is the case. I cannot explain his disappearance to your satisfaction; but believe me when I assure you that all is well with him."

She tried to smile, but the tears began to glisten on her long lashes.

"I believe you, Mr. Lispenard. I will try to be satisfied."

She held out her lovely satin-smooth hands. He gathered them closely into his own. His face glowed with a sort of luminous pallor. Thank God! She no longer found him repulsive!

"Go with Aunt Elinor," he said, his deep voice growing unspeakably kind and sweet, "and be happy, Miss Vye—forget everything but this one fact—in spite of all that has happened, you are neither friendless nor forsaken."

She made him a grave little bow, turned quickly, and went away up the garden-path to the house.

CHAPTER XXXI.

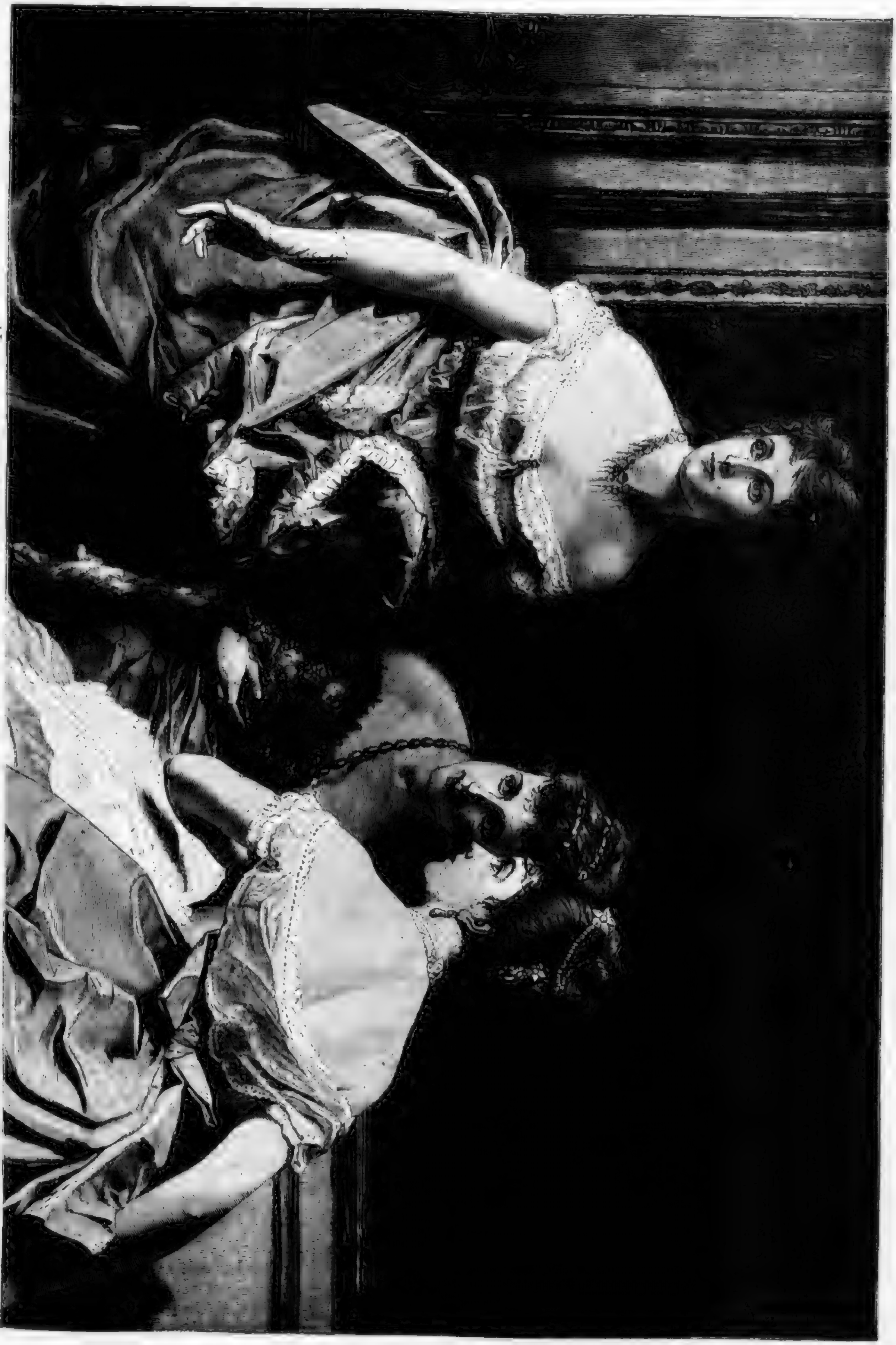
DEATH.

Elinor Vye carried her niece to town, and, by various excuses, such as fatigue and illness, and a burning desire to pay visits and make purchases, she succeeded in keeping Mignon from Rookwood three entire days. Then the twain returned, to find the old house remarkably quiet—no strange men about it, no mystery, no suspense. The search for Gilbert Vye was over, and his nephew Cyril, baffled, chagrined, defeated, had abandoned the hunt, and was now meditating what his next move against Mignon's peace should be.

Both the river and the station—the main avenues of escape from the Dale—had been watched night and day, and yet Gilbert Vye had managed to elude his nephew—yea, he was gone! The outlaw's wonderful luck had not yet deserted him, it seemed.

"He never got off without help," said Cyril Vye privately to his father, and he ground his teeth in a fury of impotent disappointment. "Somebody gave him a hand. Now, who was it?"

"I neither know nor care," answered the elder Vye, in deep disgust. "Never mention the affair to me again, Cyril! Thank God he has escaped! You would have made a shocking scandal, and overwhelmed us all with utter disgrace, simply to gratify your spite against Mignon. Gilbert is gone, and you may be sure that none of us will ever see him again."



THE THREE SISTERS.—FROM THE ORIGINAL PAINTING BY KIESLING.

"We shall *hear* of him, sooner or later," said Cyril, dryly.

As for Mignon she bore herself with quiet dignity, keeping close to Aunt Elinor, and making no mention either of her father or her recreant lover, whose abrupt departure had provoked much comment in the Dale. It was now known everywhere that Shirlaw's engagement with the beautiful Miss Vye was over, though nobody pretended to understand why the match had been so suddenly broken off.

Cyril Vye watched her closely, but gave her no other annoyance. Mignon had a vein of heroism in her nature—she did not wear her heart on her sleeve for daws to peck at. She could suffer and keep silent. Her big, eager eyes looked wistfully at the mails as they arrived at Rookwood, but no word came from her father. Sometimes her anxiety seemed more than she could bear. In such moments she had but one comfort—the memory of her last conversation with Lispenard by the river.

As she was passing Elinor Vye's dressing-room one morning, the door chanced to be standing half-open, and Mignon, glancing through, saw, to her astonishment, the lady of Rookwood on her knees, in the centre of the apartment, with hands raised in supplication to her son, who stood with his back to the threshold, looking down with cold indifference on his kneeling mother.

"Cyril, Cyril!" Mignon heard her plead, wildly, incoherently, "don't tell her—don't break her heart! He is gone—we shall never see him again—*she* will never see him again—she need never know the truth. Oh, it would be wicked, it would be cruel to tell her *now*. Have mercy upon her, Cyril—have mercy upon me, your mother!"

"My dear mamma, you plead well," sneered Cyril Vye, "but what mercy has she ever shown to me?"

"See me here at your feet, for her sake," groaned the unreasoning woman. "Spare her, Cyril!—do not make me curse the hour you were born!"

Mignon stood rooted in her tracks, unseen, wondering. For whom could Elinor Vye be pleading so abjectly, and what was the fearful thing that was not to be revealed? Cyril Vye seemed to deliberate for a moment, then he drawled, carelessly:

"I will make a bargain with you, if you like, mamma. Pay my debts, and I will hold my peace—at least, for the present. My father declares he can no longer raise the money to meet my obligations—do you assume the task, in his place, and I promise to be—for a season, at least—as silent as the grave."

"I will! I will!" gasped Elinor Vye. "I will sell my jewels, Cyril. They are valuable enough, as you well know, to cover your debts."

He gave a heartless little laugh.

"Indeed they are! Greatly obliged, I'm sure. By my soul, what fools these women be! They are never so happy as when deep in heroic sacrifice. It seems a great pity, though, for I have her now in my power——"

"No, no, Cyril; *I* am here!"

"You!"—contemptuously—"pooh! It is fortunate for her that I am open to bribes—that I *must* have money——"

Mignon heard no more. A sudden panic seized her. She turned noiselessly and darted down the stair, trembling with a nameless terror.

"Eavesdropping is an unprofitable business," she said to herself, and she tried to laugh, but could not.

For days after the memory of that scene in Elinor Vye's dressing-room haunted her like a nightmare.

Wintry desolation settled in the Dale. All the Summer dwellers had departed. The pretty villas along the river were now closed and deserted. Silence and gray skies prevailed.

At Rookwood life had grown as colorless and monotonous as the world of nature outside.

"Your Uncle Philip has decided that we must pass this season at the Dale," said Elinor Vye to her niece. "He has offered our Boston house for sale. I am very sorry for your sake, dear. Winter in the country is always lonely for young people, and I had hoped that you would make your *début* in society before the holidays were over. But," sighing deeply, "it has been ordered otherwise, and we must submit."

"Never mind, Aunt Elinor. I dare say I am far happier here with you than I could be in town," replied Mignon, cheerfully.

Philip Vye was now rarely seen at Rookwood. It was understood that a great pressure of important law business kept him in the city. Cyril came and went, but he had changed his tactics. Of a sudden Mignon found him deferential, unobtrusive. He no longer exasperated the lonely girl with his love-making. Only in unguarded moments his ferret eyes would fill up with the old greedy, devouring passion, and warn her that she was not yet safe.

No word came from her father, none from Esther—none, even, from Maud Loftus. She had told Lispenard that she was forsaken by everybody, and so, indeed, she seemed to be.

"You are the last friend left to me, Aunt Elinor," she said, mournfully, to Philip Vye's pale wife.

"God grant that we may not be divided, dear, for a long time to come," answered Elinor Vye, with a queer, frightened look. "You need me, Mignon; you do, indeed!"

"Oh, I know it, I know it, Aunt Elinor!" answered Mignon, as she threw her arms around the frail, gentle woman. "You are the one barrier betwixt me and evil; you are my guardian angel."

Elinor Vye fondly smoothed the ruffled gold of the girl's hair.

"They have been very cruel to you," she said, softly. "Every one, and Captain Shirlaw the most cruel of all! Ah, you still shrink at his name; but you are young—you will forget him. Time is a wonderful healer. I wish—I wish that we could find your sister Esther, poor child, for if I should die suddenly you would greatly need her, Mignon—indeed, she would be your only hope."

"Do not talk about dying suddenly, Aunt Elinor, you frighten me—you break my heart! Surely you are not ill?"

"No, oh, no!" replied Elinor Vye, with a sad smile. "Only at times there is a strange feeling here," pressing her thin hand to her heart; "but we will not borrow trouble, my dear."

After a while she went to the window and looked wistfully out across the snow-covered lawn and garden to the river.

"I wonder why Abel Lispenard comes no more to see us?" she said, in a musing tone. "He is still at his tower, and the servants tell me he has made preparations to pass the Winter there. I hope nothing has been said or done here at Rookwood to displease him,"

"Why, now that I think of it," said Mignon, in a surprised tone, "we have not seen him for weeks, Aunt Elinor!"

"True. I miss him greatly. We at Rookwood are indebted to Abel Lispenard for many favors. It is only by his generosity and forbearance that we live to-day in this home of your ancestors. Well, my dear, since Cyril and your uncle dine in town, you and I will have a quiet evening with some of our favorite authors. We are not likely to be interrupted, for, with the exception of Mr. Lispenard, who no longer visits us, all our friends are now gone from the Dale."

Mignon went to the library, and brought forth some of Mrs. Vye's favorite books, and the two sat down together in the quiet drawing-room. Outside, the night fell gray and cold, with snow-flakes floating, like scales of silver, through the frosty air. Mrs. Vye worked, as usual, at her embroidery, and Mignon, opening a volume of Owen Meredith's later works, read from that strange and solemn poem, "Thanatos Athanaton." Once she glanced up, and saw that Aunt Elinor looked singularly worn and tired, and that her fingers moved but slowly through the colored silks.

"Do I weary you, Aunt Elinor?" said Mignon, anxiously. "Shall I stop?"

"No, no, my dear," answered Aunt Elinor, with a cheerful smile; "go on—pray go on!"

She went on, for a half-hour or more. The room remained silent, save for her voice. It was a slight movement in the neighboring chair that attracted her attention at last. She looked up in time to see the colored silks drop softly to the floor. Mignon sprang to her feet, with a wild cry:

"Aunt Elinor! Aunt Elinor!"

But no voice answered. The thin, patient hands had fallen on her lap. Her head drooped forward, the chin was resting on the motionless breast. A blue, strange pallor had settled around eyes and lips.

"Speak to me, Aunt Elinor! Speak to me!" prayed Mignon, clasping the silent, chilly shape in her frantic arms; but Elinor Vye would speak no more. Mignon's last friend had flitted away, like sister, lover, father, though on a longer and more solemn journey than either; for there, in the drawing-room of Rookwood, in her easy-chair, under the bright gas-jet, Elinor Vye sat stiff and cold and dead.

CHAPTER XXXII.

AUNT DEB'S TROUBLE.

IT stood with one end turned upon a narrow, dark street, not far from Charlestown Bridge—a shabby little cottage, painted a faded yellow, and surrounded by a high wooden wall, fast going to decay. Wedged in between taller buildings, on the sunless side of a city street, the place was not attractive to look at, but it wore an air of retirement and seclusion. Not many days after the flight of Esther Vye from Rookwood, two women, one young and handsome, the other old and ugly, took possession of this dismal little abode, and under its roof set up their household gods.

"We could not live longer in Cinderville, Aunt Deb," said Esther Vye, with a heavy sigh. "After all that has happened there, neither of us could endure the place. A city is like the sea—it swallows and conceals everything. Here we shall be lost, here no one will care who or what we are, and above all, here no person can come seeking us."

Aunt Deb, who looked older and thinner than when we saw her last, rocked back and forth in melancholy fashion.

"I don't care where I am, Essie, so long as I'm not separated from you. Thank the Lord, you had the heart to leave your pa and all your grand kin, and come a traveling back to Cinderville, to find your poor old aunt! I thought to goodness I should die of sheer lonesomeness after Jim Hart took you away—I shall always call him Jim, because that's the only name that seems nat'ral to me. Well, you've tried a husband, and you've tried a father, and rich relations beside, and you've just turned back to me, like the dove to the ark; though the Lord knows you're no dove, Essie, and as an ark, I ain't altogether seaworthy."

They were resting together in the strange cottage, after the labor of unpacking Aunt Deb's possessions. The younger woman had assumed dominion over the elder. So overjoyed was Aunt Deb to find her niece again, that she seemed no longer to have any will but Esther's. Without a murmur, she had suffered the girl to hurry her away from Cinderville—without a murmur she now sat down in this dark city street—in this stifling little cottage, knowing that it was to be her permanent abode.

Esther had told her nothing concerning her flight from Rookwood. She simply declared that it was all the result of unbearable homesickness, and with this explanation, Aunt Deb was satisfied.

"As for anybody seeking you here, Essie," went on the old woman, "you needn't fear that. I'm certain you never killed your Canadian husband, though 'twould have served him right if you had—the traitor! I'm glad to see that you're so well weaned from his memory."

Esther, with her chin in her hand, and her turbulent eyes on vacancy, shuddered, but answered not a word.

"Father Joe," quavered Aunt Deb, "left something; we'll live on that for a spell. I wonder Jim h'ain't helped us more," peevishly. "Looks as though he wasn't as rich as he pretends. Be you a-going to let him know your present whereabouts, Essie?"

"No; why should I? Henceforth I will take care of myself. I am an unnatural daughter—I never loved my father, as a girl should—I love him less than ever now."

Aunt Deb looked strangely uneasy.

"And your stepsister?" she faltered; "do you love her, Essie?"

"Yes; but we will not talk of *her*," answered Esther, in a low, distressed tone.

The two soon settled down to a life of nun-like quiet and simplicity. Strangers in a strange city, they rarely went beyond the tall, rickety gate, which shut them in from the narrow street. Something strange was working in Aunt Deb. She grew more and more depressed. On her mind lay a burden which, strive as she would, she could not throw off. At first she said nothing about it, but simply sat in the dark, silent cottage, and watched Esther, warily, hungrily. Should she open her heart to the girl? No, she could not—she dared not! But one night, quite unexpectedly, a crisis came.

Aunt Deb had been out to prayer-meeting in a little Methodist chapel at the corner of the street. Nine o'clock was striking when she returned to the cottage. By an air-tight stove in the small living room sat Esther, busy with a piece of sewing. She was startled by the odd, haggard look on Aunt Deb's face, as the elder woman put off her black shawl and bonnet. Aunt Deb had failed greatly since leaving Porgy Rock. Perhaps she missed the wholesome freedom of the sea.

"The minister at the chapel to-night," she quavered, "preached a powerful sermon on the necessity of repentance. I could feel the hair a-rising on my head as I listened to him, Esther. A bad conscience is a fearful thing. It bites like a serpent and stings like an adder."

"True—too true," said Esther, with a heavy sigh;

XUM

"but *your* conscience is clean, Aunt Deb—you have only the common sins of daily life to repent of."

"Little you know about it, child!" cried Aunt Deb, shrilly. "I'm a wicked old woman—I've been desperately wicked for long years, and all for Jim Hart's filthy lucre! Lord help me! It's no use, Essie—I've *got* to tell you—I don't want to, but something's a-driving me ——"

Then, from her stricken hand, the black shawl and bonnet dropped helplessly, suddenly, and Aunt Deb followed them, and lay in a voiceless, motionless heap upon the cottage-floor.

Esther, in great alarm, in her strong, young arms, lifted the old woman, put her upon the bed, and ran for the nearest doctor.

The man of medicine came, examined the sufferer, and said, briefly, "Paralysis!"

Aunt Deb heard the fatal word, and recovered speech.

"There! I've got my death-warrant, Esther!" she groaned. "It's only a mild shock, but I'm an old woman—it's easy to see that another will soon follow. Now, first of all, I must send for your father, Jim Hart."

A message was dispatched to Gilbert Vye, that very hour, but no response came to it. Then Aunt Deb said:

"You must go to Rookwood, Esther, and bring him to me!"

"Oh, Aunt Deb," cried Esther, wildly, "don't ask me to do that—anything but that."

Go to Rookwood—encounter Victor Shirlaw again? No, no, she could not.

"What I do must be done quickly," urged Aunt Deb. "My time is short. I *must* see Jim—I must—I must! There's something on my mind, and it is to be told to him, and him only."

Esther pondered.

"I do not understand why he has left our message unanswered; but I will soon know. Dare you stay alone for an hour or so, Aunt Deb."

"Yes," groaned the old woman.

Straightway Esther donned her outer garments, tied a thick vail over the face, which was far too handsome to pass unobserved in any place, and, closing the wooden gate behind her, walked rapidly off across the bridge to the city proper.

She knew where to find Philip Vye's law office. She had learned its location during her stay at Rookwood. By dint of brief inquiries, made exclusively to those of her own sex, she reached the vicinity of Pemberton Square and Court Street. Here was a perfect nest of law offices. She searched until she discovered the names of Philip Vye & Son; then she ascended a flight of stairs, opened a door, and found herself in the presence of a young man with a red mustache and an eyeglass, seated alone at a desk reading law papers. The girl flung back her vail, and asked for Philip Vye.

"He is in the inner office, busy with a client," answered Cyril Vye, staring hard at the wonderfully handsome visitor. Pardon me—you are ——?"

"I am his niece."

Cyril bounced up from the desk.

"Then you must be the Esther that I have heard of, but never seen. Ha! ha! 'Pon my soul, they did not stretch the truth when they called you handsome! Allow me to introduce myself. I am your cousin Cyril!"

He extended his hand. She touched it reluctantly. At the same moment the door of the inner room opened, and Philip Vye stepped forth.

"Humph!" he said, in a dry, hard voice, quite devoid of welcome. "Niece Esther! You left us very abruptly at Rookwood, did you not? Your secret leaked out after a time. Victor Shirlaw made love to you, and frightened you away, eh? You ought to be labeled 'Dangerous!'"

She colored, then grew pale.

"I wish to see my father," she said, trying hard to command her voice. "Shall I find him at Rookwood?"

The two men exchanged glances.

"No," replied Philip Vye, coldly; "your father left Rookwood in great haste some days ago. He has probably gone back to the West."

"The West!" echoed Esther, aghast. "Will he not return?"

"I think not—I am sure not!" dryly.

"Never?"

"Never!"

Her face fell. So this was the real reason why her message had remained unanswered.

"My sister; is she well?" faltered Esther.

"Mignon is well and happy," replied Philip Vye, sharply. "She wears the willow with becoming resignation. You know, of course, that, because of you, Captain Shirlaw jilted your sister. I would invite you again to Rookwood, but your presence there would scarcely be welcome to Mignon now. A woman can forgive everything but the robbery of her lover. I hope your father has provided for your future. You look—pardon me—somewhat shabby. Where are you living? What are you doing? But never mind, you need not tell me. I have assumed the responsibility of one of Gilbert's daughters, some second party must look out for the other. Farewell."

And he went back to the inner room.

Full of indignation, yet determined to carry to Aunt Deb some definite clew to her father's whereabouts, Esther turned to Cyril Vye, who had not taken his eyes from her face.

"I did not come here seeking either charity or insults," she said, with a flash in her big eyes; "but only to ask where my father can be found."

"Many others would like to know that very thing," replied Cyril, airily. "Indeed, I may say that scores of people are burning to find him. Apparently you know about as much concerning your father as does Mignon. Oh, this is unique! Two daughters kept in the same blissful ignorance; two girls, reared apart, but in like fashion. Ta, ta! His favorite address, and the only one to which I can direct you, is Happy Valley Ranch, Colorado," and he laughed offensively.

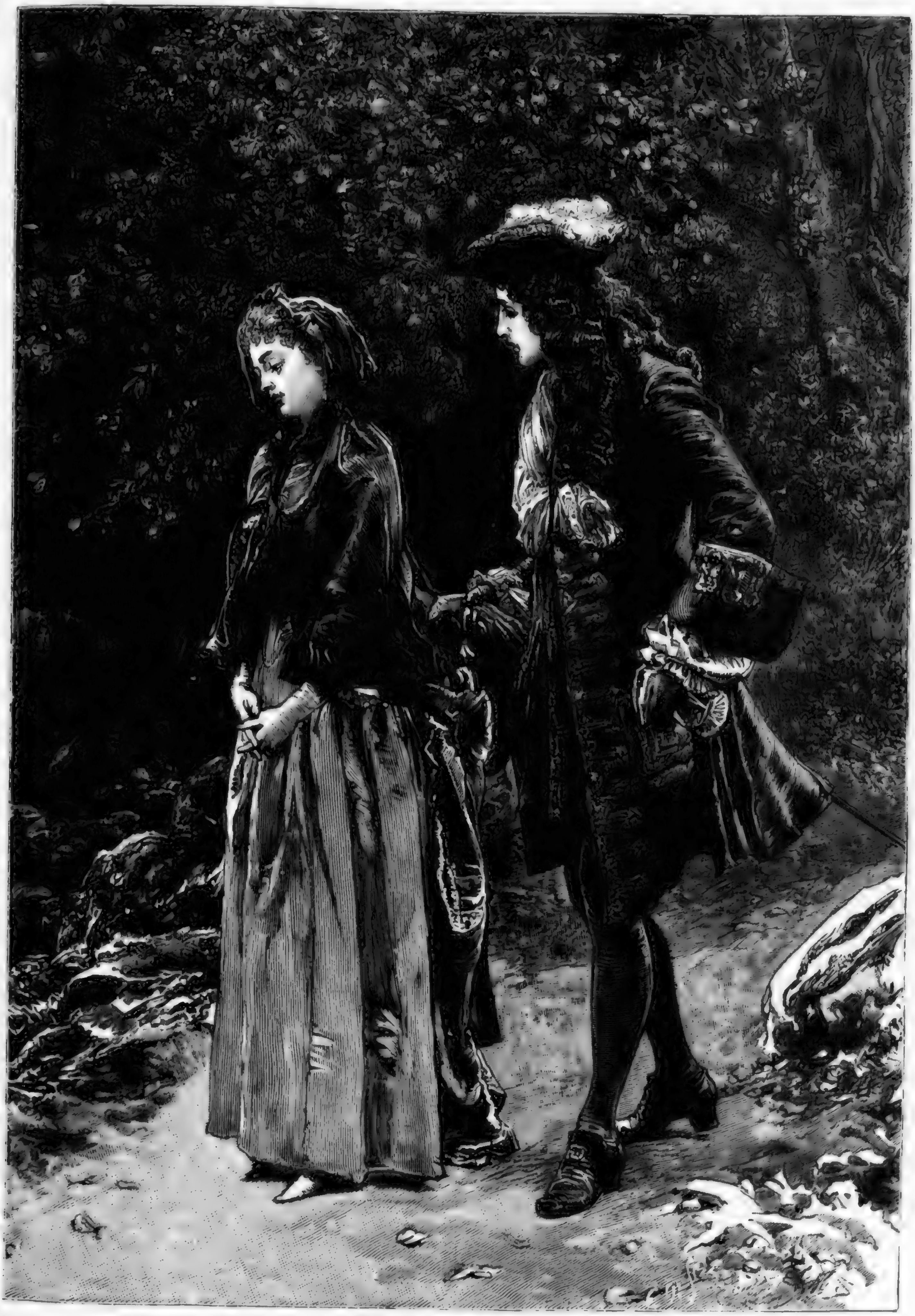
Esther had never met a more disagreeable person.

"Happy Valley Ranch," she echoed, regarding him with ill-concealed aversion; "is that the real name of his Western home?"

"The *real* name? Oh, of course!—most certainly!" with another strange outbreak of mirth.

"I know very little about the West," said Esther, striving hard to keep down her indignation. "Will you be more definite? Will you tell me the exact location of the place you mention?"

"Of course—of course!" He seized a small railway map that chanced to be lying on his desk. "Look here, my handsome cousin, if I desired to find Happy Valley I would start at the hub of the universe and follow this line which I make with my pencil," vivaciously tracing a route over the paper. "I would go in this direction as far as the railway terminus, and then, by Jove! I would take the stage for the township of Happy Valley, keeping



A SUIT THAT DOES NOT PROSPER.

on the way a sharp lookout for road-agents, particularly for one fellow, called in that region, Black Dave, the king of them all, and a person much sought after by the vigilants—ha! ha!"

Was Cyril Vye a well-balanced being? She gave him a cold, forbidding look, but put out her hand for the little map marked with his pencil.

"Permit me to keep this," she said.

"Certainly, with all the pleasure in life, cousin. Can I oblige you in any other way? Have you no message to send to our poor jilted Mignon? No? Then adieu. It's a pity I have not time to cultivate your acquaintance further."

With his mocking voice ringing most unpleasantly in her ears, Esther went away down the stair. She hastened back to the Charlestown cottage, and repeated to Aunt Deb every word of her conversation with the two Vyes.

"My father will never visit the East again," she said; "we shall never see him again, Aunt Deb."

An extraordinary agitation seized the paralytic. She rocked herself piteously back and forth in the chair to which she was now confined.

"Oh, why didn't I know it before?" she groaned. "Why did he go without a word to me? Lord help us! But this is trouble, indeed!"

Then, meeting Esther's large, questioning eyes, she broke into weak sobs.

"It's for your sake, Essie—for your sake! I can't explain now, but you'll know some time. Sit down this very minute and write to Jim at his Happy Valley Ranch, and tell him I've got to see him at once on a matter of life and death. Tell him he had no business to go off in that way. Why didn't he come to bid me good-by? Then he would have heard the whole story, for I'd made up my mind to keep it no longer. The very day before Father Joe was drowned off Porgy Light, he and I had some talk about this very matter, and we agreed 'twould be best to let Jim know the whole truth. And now he's got to come back from Colorado and hear it - it can't be writ. I won't put it on paper. He's got to *come*, and soon, too, or he'll find me under the sod."

Esther, uncomprehending but obedient, wrote according to Aunt Deb's dictation. The letter was directed to Gilbert Vye at Happy Valley. Day after day the two women waited vainly for a reply. Aunt Deb was in a fever of impatience.

"He thinks it's an old woman's whim," she cried. "He's too busy to heed it. Somebody must *go* to him."

Her withered, half-helpless body slipped from the chair and sank at Esther's feet. She clasped the girl abjectly about the knees.

"It is you who must go, Esther! For your own sake, for mine, for the love of God—say you will!"

Esther drew back, overwhelmed, horrified.

"I! Oh, Aunt Deb, I know nothing of Colorado or Happy Valley. It is so far away, too. I cannot—I cannot!"

But Aunt Deb only clung the closer, and grew the wilder in her pleading.

"We have father Joe's money. You shall take plenty to spend for the journey, Essie. You must—you must! You will kill me if you say no! Jim must be brought to me before I die. Who but you can do it? I'll not rise from this floor till you say you will!"

Unspeakably dismayed at the thing required of her, Esther argued, refused, but without success. Aunt Deb would neither disclose the secret of her pressing haste to see Gilbert Vye, nor abate her passionate prayers and entreaties. In despair the girl said, at last:

"When do you wish me to go?"

"To-morrow."

"Alone?"

"Yes. No one will harm you. In these days women go everywhere unattended. Moreover you have the whole route marked out by your cousin on that railway map. Come back as soon as you can, and fetch Jim—only fetch Jim!"

Esther's heart sank like lead. How *could* she attempt the long, strange journey? Was it the whim of a sick old woman, or did some need, vital and urgent, really exist for this—to her—stupendous undertaking? She raised Aunt Deb from the floor, at last.

"Very well," she said, drearily, "I will go, since you urge me so much; but what will you do while I am away?"

"I will stay here and wait for you to come with Jim. You will be at Happy Valley and home again in three weeks."

"And suppose my father should refuse to return with me?"

"He will not. I shall send him a message that will *compel* him to come."

Esther stood up, tall, splendid, but unutterably dejected, in the small, dingy room.

"Something has been worrying you, Aunt Deb," she sighed, "ever since we left Cinderville; something is breaking your strength, sapping your life, making you miserable, and, if a journey to Colorado will relieve you, I am willing to undertake it, though I have a presentiment"—pressing her hands wildly to her temples—"that it will not end well."

"We can't help that!" shivered Aunt Deb; "the Lord will take care of that. At any rate, Jim must come, and stand face to face with me again and hear what I have to say."

"Reluctantly, and with a heavy heart, Esther made her preparations for this strange journey, which was forced upon her so much against her will. A hired nurse was found to take care of Aunt Deb during the girl's absence.

"Make haste, Esther!—make haste to bring Jim!" urged the old woman, with querulous persistency. Any fear for Esther's personal safety she seemed not to entertain.

And so, one Autumn day, Esther left Aunt Deb in the Charlestown cottage, and alone, unprotected, set forth to seek Gilbert Vye in the far, wild land, where, alas! he was known only as Black Dave, the king of the road-agents.

CHAPTER XXXIII.

"UNDER THE LIGHT OF THE MOON."

Elinor Vye was buried in the family vault at Mount Auburn. It was a private funeral, and Lispenard did not see Mignon till all was over. Then he hastened to the old mansion across the river, and was admitted to a darkened drawing-room, still smelling of funeral flowers, and there she met him, with her pallid, Psyche-like beauty shrouded in blackest crape, and the horror of death yet haunting her great, velvety eyes. Hot lightnings seemed blinding Lispenard's sight. He could scarcely command his voice to speak.

"What can I do for you, Miss Vye?" he said.

She appeared to gaze over and beyond him into empty, cheerless space.

"Nothing," she answered.

"My God! How ill you look!" he burst out, wildly; and then checked himself, and added, in another tone: "Has no one attempted to find your sister?"

"Yes, but without success. Oh, Mr. Lispenard," wringing her small hands, suddenly, "how *could* Aunt Elinor die and leave me here alone?"

He made no attempt to comfort her—uttered none of the phrases that are considered proper for such occasions. That girl, standing before him in her sombre dress, with the yellow hair rippling about her white, grieved brows, and eyes full of loss and desolation, struck him dumb. He bowed himself out, but turned back and uttered these words, in an unsteady voice:

"I wish to be near you. It is possible that you may need me. Remember, I shall not leave the Dale for the present." Then he was gone.

An hour or two after, as Mignon sat in her own room, desolate and comfortless, a rap fell on the door, and the housekeeper, for long years a favorite at Rookwood, entered, in shawl and bonnet.

"Your uncle has discharged me without warning, Miss Mignon," she said; "there's a strange woman coming within an hour to take my place. You will see a great overturning here, now that your aunt is gone—poor blessed martyr! Good-by, Miss Mignon! I hope no harm will befall *you!*"

And she departed.

Scarcely had her footsteps died away, when another rap startled Mignon, and this time Elinor Vye's waiting-woman, followed by the cook and two maids, entered.

"We've all got to go, miss," said the cook, "with a week's extra wages, for being sent off in this fashion. Your uncle has no further use for us, he says. Good-by, miss—we wish *you* well!"

And these four vanished in the track of the housekeeper.

A foreboding of evil fell suddenly on Mignon. What did this hasty discharge of all the female servants of the house mean? She flew to the library, where she knew she would find Philip Vye. He was writing letters at a table, but he arose with an impatient air to meet her.

"I can guess what you wish to say, my dear," he began, before she could frame a sentence, "but it was quite impossible for me to get on amicably with Elinor's servants, and so, very properly, I have sent them all packing and engaged a new lot. You are not to trouble yourself about such matters, my love—at Rookwood the reins of government are always in *my* hands."

She had meant to protest in some dignified way, but his cool, authoritative tone, silenced her.

"I must remind you, my dear child," continued Philip Vye, airily, "that your position in the house is now somewhat changed. Your father seems to have abandoned all thought of you, and virtually turned you over to me to control and support. Since no more supplies are likely to come from him, you must consider yourself dependent upon me, and be prepared to submit to my authority in all things. Your Aunt Elinor was somewhat given to spoiling you, but I"—with an unpleasant smile—"have no weakness of that sort."

Before him she stood up, slender and white in her mourning dress, the sumptuous crown of yellow hair the only bright thing about her.

"I shall *not* be dependent upon you, Uncle Philip," she answered, with spirit. "I am young and strong—I have a good education—I can earn my own living. And I feel sure that papa has *not* forsaken me. In due time he will explain all that seems mysterious in his conduct now."

"My dear Mignon, do not harbor such false hopes. You are a pampered, helpless creature—you know no more about earning your own living than a child unborn. As for your father, rest assured that he will never *dare* to communicate with you again."

"Dare—dare!" angrily; "what does that mean, Uncle Philip!"

He smiled, in an exasperating way.

"I decline to enter into explanations. Let me give you a word of advice, Mignon—submit to the irremediable!" Then he opened the door and calmly motioned her out.

The new housekeeper arrived within the hour—a gaunt, gray creature, as deaf as a post. Two stolid housemaids attended her. Somehow their strange, indifferent faces, so suddenly substituted for the kind, familiar ones of the old servants, struck a chill to Mignon's heart. This radical change in the house meant evil to herself.

She shut herself into the now dreary and desolate drawing-room and tried to think. She must leave Rookwood, and go forth alone into the world to earn her own bread. But how? She could dance, paint, sing, play—she knew, in a superficial way, a variety of things, but could she turn such knowledge to practical account? Barely seventeen, forsaken by father and lover, without money, or experience, or friends—for Mignon was wise enough to understand that the fair-weather acquaintances of a single season could not be reckoned as friends—what was she to do? What *could* she do? It was small wonder that her heart sank within her.

A shadow suddenly darkened the window. She glanced up and saw her uncle Philip standing outside, drawing on his gloves.

"Good-by, my dear," he said, nodding carelessly to his niece. "I am called away on important business. It is possible that I may be obliged to go abroad for a few weeks. Take care of yourself till I return."

Then, in airy unconcern he kissed his finger-tips to her, and walked jauntily off across the terrace.

Her first feeling was one of relief. At least, he was leaving her free to make and execute any plan for independent action. Plainly he felt no responsibility toward her—why should she not assume the same indifference toward him?

She sat pondering the situation till the dinner-bell rang. In this nineteenth century one is expected to dine even though troubles multiply, like Pelion piled upon Ossa. Mignon arose with a weary sigh. As she entered the warm, lighted dining-room, she immediately saw that the sumptuous table was spread for two persons, and that a man was lounging in a crimson-draped window at the far end of the room in an attitude of waiting. He turned as the door opened. She had not seen him since Elinor Vye's funeral—had not even thought of him, and she now experienced an unpleasant shock.

"It seems that you and I are to dine *tête-à-tête* to-day, cousin," said Cyril Vye. "My father was obliged to leave us in haste, you know."

She seemed turning to marble.

"And do *you* remain here in his absence?"

"Yes," answered Cyril Vye, with a sinister smile, "I remain!"

Philip Vye gone, strange servants in the house, and this man in full control of everything!

The angry blood flew into Mignon's pale cheek.

"Enough!" she said. "You will dine alone to-day. Even Rookwood is not large enough to hold you and me, Cyril Vye."

He tried to step betwixt her and the door.

"Wait a moment, Mignon," he hissed. "My time has come at last! I have you now at my mercy!"

She looked at him with withering disdain.

"Do you really think that, sir? And, like the coward which you are, you wish to take advantage of misfortune? Surely I needed but this to make my position at Rookwood intolerable! Stand aside and let me pass!"

He had found his match in this blazing, yet colorless, young creature. His weak, guilty eyes fell before hers. He moved slowly, sulkily, as she bade him.

"You are my father's ward," he fumed; "you shall not leave Rookwood without his permission. In his absence I must take charge of you."

"Cyril Vye," she answered, "you have reckoned without your host."

Then, with head held high she passed out, and flew straight to her own chamber.

The short, chilly day was dying in cloud and sleet. Fortunately she had a little money in her purse.

"I will at once throw myself on the friendship of the Berkelys," was her sudden determination.

Trains for town stopped constantly at the Dale station, which was but a short walk from the Rookwood gates. She had no farewells to make. She packed together the most valuable of her possessions, put on a long cloak, a close bonnet and a thick vail, and then started to go down-stairs. Alas! the door of her chamber would not open. She shook it—in vain! It was fast. Some one without had turned the key upon her while she was busy within. Mignon was a prisoner.

Any outcry, she knew, would be useless, and to whom could she appeal for help? Even the poor protection of Philip Vye was now withdrawn from her. Cyril and the strange servants alone held possession of the house. He had made no idle boast in declaring that he had her at his mercy.

She sat down in her dark, lonely chamber as if stupefied. The night was now falling. The wind soughed across the curtained windows, the sleet rapped sharply on the pane. She sat there staring with wild, dilated eyes into the blank gloom. Once, twice she heard Cyril Vye's stealthy step creeping along the corridor outside. He paused at her door—he seemed to listen, then he moved on a few paces, only to return to the same spot. She could hear his smothered breathing through the keyhole. An agony of fear and indignation seized Mignon. This man was her jailor—at any moment he might open the door. In the darkness her hand moved spasmodically toward her dressing-table and grasped a long, sharp pair of scissors—long enough, sharp enough, to reach to her own heart.

"If he dares to cross the threshold," she said to herself, resolutely, "he will find me dead in this chair."

Surely the old colonial house of Rookwood, full of the ghosts of departed generations, had never held a sadder or more desperate being than was Mignon this night.

One hour and then another went by. She heard no longer the stealthy step at the door. Her jailor had slipped away for a space. She listened. Somewhere near at hand a clock struck eleven. At the same moment, a pale, watery gleam of light crept through the curtain and fell at Mignon's feet. She arose from her chair, stole softly to the window and looked out.

Her chamber was high up in the wall. Below it sloped the roof of a piazza, now slippery as glass with new-fallen sleet. The storm was passing away and the moon, breaking through torn clouds, touched this perilous surface and made it glisten like a sheet of silver.

Noiselessly Mignon pushed back the fastening of the window, and raised the sash. Then she mounted the sill, and, with a prayer trembling on her white lips, stepped down upon that slanting, icy roof beneath. In this disgraceful way must the fairest daughter of all the Vyes depart from the home of her ancestors!

One moment she clung, shuddering, to the casement; the next, she shot forward, and fell full fifteen feet to the ground below.

She lay for a space, stunned and motionless. Had the noise of her fall reached any ear inside the house? If so, pursuit would be instantaneous. Goaded by a sense of her great danger, she lifted herself at last. Bruised and shaken she certainly was, but not otherwise injured, and the free winds of heaven were blowing upon her, the free sky bent over her homeless young head. She staggered to her feet, and fled, blindly, breathlessly, down the garden-walk, straight to the river. The leafless trees, creaking under their weight of sleet, sounded all about her like pursuing footsteps. She reached the bank of the stream. Thank God! there was Philip Vye's skiff, moored to a willow-tree? She sprang into it, loosed the rope, took up a pair of oars that lay in the bottom of the little craft and pushed out into the river.

The current was strong. In her inexperienced hands the skiff swung round giddily. As she strove to right it, the half-shrouded moon burst suddenly out of the clouds overhead, and poured its full splendor down upon the river, the boat and the fugitive. Mignon's heart gave a great bound. Back on her memory rushed the gypsy's prophecy, made long months before, in the green shadows of a June wood.

"*When you cross water by night remember what the Romany said to you—you are lost if you take to the water under the light of the moon!*"

A thrill of terror shot along the girl's tense nerves. Here was the water, there the moon. Should she turn back? Could any danger before her equal that which she had left behind? As her slack hands rested hesitantly on the oars, the boat began to drift down the current. This recalled her to herself. With an effort she rowed up stream a little, the gypsy's words ringing in her ears:

"You are lost if you take to the water under the light of the moon!"

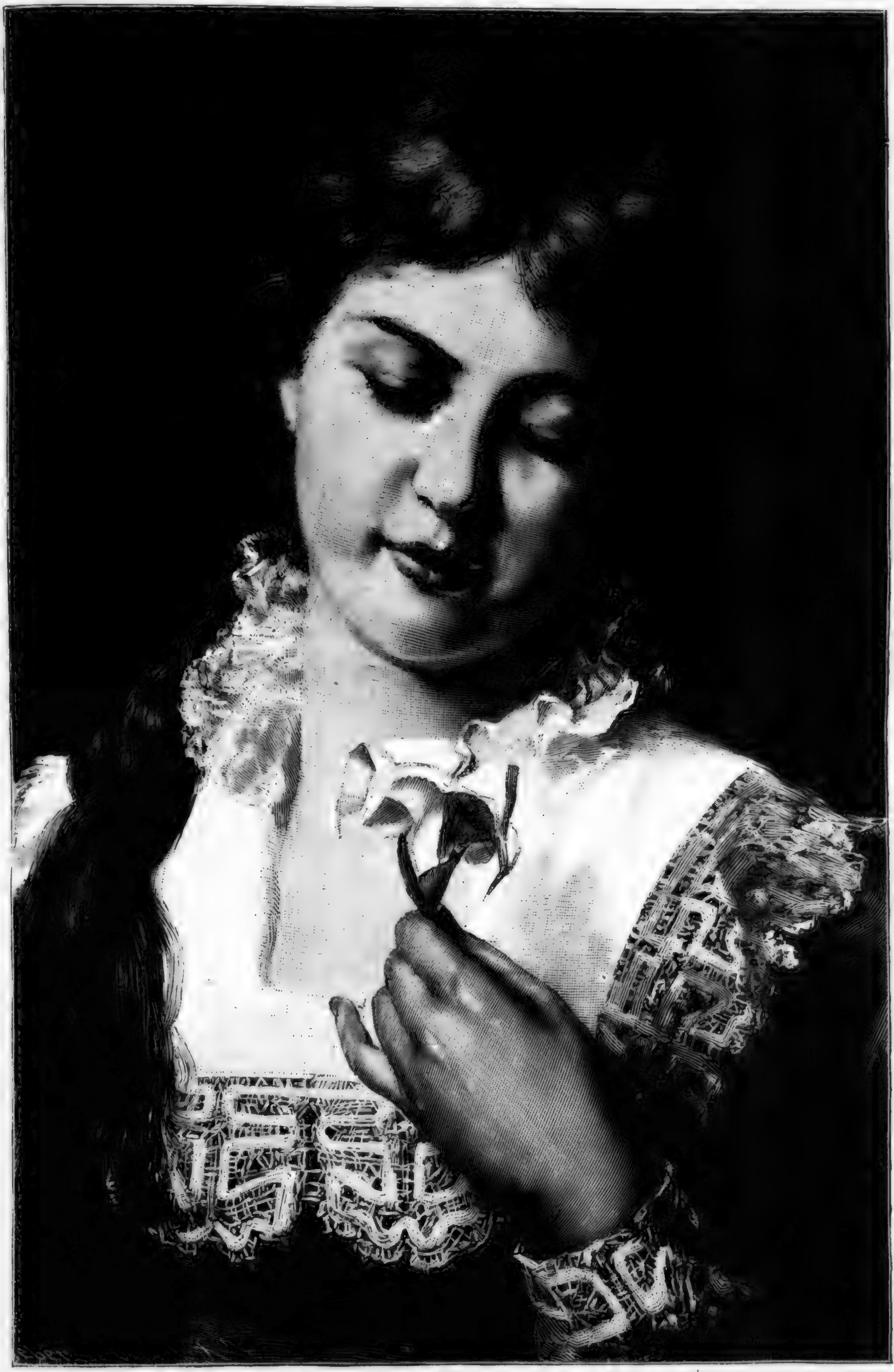
She cast one glance over her shoulder to Rookwood, another before her to the opposite bank of the fateful river, then Mignon went on, leaped from the skiff to Abel Lispenard's stone jetty, and as she made no effort to secure the boat, it recoiled from the bank and drifted idly away down the stream.

CHAPTER XXXIV.

MIGNON'S REFUGE.

Twilight was falling in the cheerless Boston streets. Sleet covered the pavements; gray wintry clouds hung low over the tossing harbor and the city steeples. A biting east wind blew in from sea.

Through one of the meanest of North End streets, in a region of dance-cellars and low groggeries and all uncleanness, a handsome private carriage, drawn by blooded horses, and driven by a coachman in livery, moved slowly in the rapidly gathering darkness. The driver was gazing attentively about, as if in search of something. At last he drew up his horses before the dingy sunken entrance of a miserable tenement-house, leaped down from the box and opened the carriage-door.



WHEN LILIES BLOOM.—FROM THE OLD PAINTING BY HELEN BÜCHMANN.

"This is the number, sir," he said, and Abel Lispenard, muffled in a cloak of magnificent sealskin, stepped out of the vehicle.

Some ragged street Arabs squatting on the pavements raised a derisive whoop at sight of the ugly dwarfed shape, with the short legs and immense square shoulders; but Lispenard paid no heed. He never noticed such insults.

"Remain here," he said to his servant.

Then he stepped into the dark, dirty hallway of the house, and came face to face with an unkempt, blear-eyed woman holding a squalling baby.

"Is there a man named Laurent living in this house?" asked Lispenard.

The woman stared with lively curiosity. Even the baby shut its toothless jaws and stared, too. In spite of his strange proportions, Lispenard was always impressive.

"Oh, you mean the sick fiddler, sir," answered the woman, respectfully. "Ye'll find him in the garret. Go up till ye can tech the roof."

Lispenard ascended the stairs, sickening at the foul odors, the dirt, the ribald laughter, the drunken choruses that met him on the different landings. Up and up he went, until he reached a tottering garret door. Here a hollow cough saluted his ears. He listened, then rapped loudly.

"Come in," a weak voice responded.

Lispenard pushed back the door and entered.

It was the poorest of attic rooms—bare, fireless. A bit of guttering candle burned on the broken-backed chair, and lighted the abject poverty and want of the place. In a sheltered corner an old mattress was spread, and on it lay the wasted figure of the sick fiddler, with a ragged coverlet gathered about him for warmth. Against the wall by his side leaned a violin. Abel Lispenard cast one comprehensive glance around the room, then went up to the miserable pallet.

"I am the brother of Lilian Lispenard," he announced, sternly. "Why did you send for me?"

The sick man lifted a spectre-like face, with dark hair matted about the sunken temples, and hollow eyes burning with fever. He tried to rise, but could not, for bodily weakness.

"Lilian's brother!" he groaned. "Oh, my God! Yes, I see! I sent for you because I am dying, and there are things that I want to tell you—things that you ought to know."

He spoke feebly, and with a slight foreign accent.

"It was a bold thing for you to do, Gustave Laurent," answered Lispenard. "I swore years ago to kill you at sight—swore that the hour of our meeting should be the hour of your death!"

"That trifle would not have restrained me from writing to you," sighed the sick man, "for I have long weary of life."

Lispenard set his teeth.

"Do not count too much upon my forbearance," he said, in a smothered voice. "You and I cannot safely breathe the same air—we are mortal foes. What you have to say, say quickly!"

Gustave Laurent raised himself on his elbow. A cough that seemed to rend his vitals shook him for a moment, then he gasped:

"There is murder in your eyes, as you look at me, Lispenard. But softly! You are laboring under a mistake. Your sister was my lawful wife—married to me, it is true, in great haste. Yes, while the wife that I detested, and from whom I had long been separated, lay in her coffin, unburied, but married legally. Here—here——" groping in his breast for an old wallet, which he opened with trembling fingers, "here are her marriage lines; she gave them to me long ago to keep. I knew—we both knew—the evil things that her people believed of her, so I sent for you to-night to show you this."

Lispenard seized the bit of worn paper which the other held out to him, read the faded words written upon it, and, overcome by a great and sudden joy, staggered back against the wall. Lilian Lispenard had been Laurent's lawful wife! It was the first ray of light that had ever shone on the tragedy of his sister's life.

"If you married her, Laurent," he groaned, "why did you desert her?"

"My God! I did not," cried the sick man, wildly; "who said that? We went to Paris. We loved each other, but we were very poor. Lilian's kindred had cast her off, and my people were hostile and repellent, for my first wife, the woman that I had hated, was, by birth, my cousin. So her near relatives and mine frowned upon my second marriage, openly insulted Lilian, and would give us no help.

"We struggled together for a while, then my darling began to droop. She was a hothouse flower—she could not thrive in want and anxiety. I was forced, at last, to go to my uncle, the father of my first wife, and beg for aid. What did he do? Overwhelmed me with insults and reproaches, and heaped the vilest epithets upon that suffering angel, my wife. I struck him in the face, and turned and walked out of his *salon*.

"It was night. I started back to my poor Lilian. Somewhere near the Porte St. Martin a carriage passed me—stopped suddenly. Two men sprang from it. Before I could utter a word, I was seized, gagged, lifted bodily into the vehicle, and hurried away to a madman's cell in the Bicêtre—you know the Bicêtre, in the Department of the Seine, in the southern environs of Paris? That was the revenge my former father-in-law took for the blow I had given him."

Another fit of coughing choked his utterance. With a transfigured face, Lispenard flew to the husband of his dead sister, tore the rich cloak from his own shoulders and wrapped it tenderly around Laurent.

"You are perishing with the cold, brother," he said, in a broken voice. "I can foresee the end of your story. You were imprisoned by your relatives in the Bicêtre, and Lilian was left, destitute and alone, in a strange land."

"Yes, yes! For seventeen years I was confined there. Then my uncle died, and the doctors suddenly discovered that I was a sane man. They released me. Seventeen years! Can you imagine my sufferings in that time, parted from Lilian, ignorant of her fate? Heaven only knows how I preserved my reason through it all! More dead than alive, I staggered out into the free day again. Where was Lilian? I hurried to the miserable *quartier* where I had left my darling, and I found—only the old *concièrge*.

"The woman recognized me, and from her I learned that a child had been born, and that my beautiful young wife had suffered unspeakable things, both from want, and from the belief that I had deserted her, for alas! she never knew the secret of my sudden disappearance—never dreamed of the Bicêtre and the madman's cell. My uncle, it appears, paid her a visit, at last, assured her that I had abandoned her, and offered to put her aboard an American ship, and send her back to her own land. She was sick and starving, the *concièrge* said. She accepted his offer. He carried her to Havre, and paid her passage on some trading vessel, bound to the port of Boston."

Unable to contain himself a moment longer, Lispenard burst out:

"Then there *was* a child! She used to rave of it, especially toward the last of her life. Once, I remember, she entreated me to go and take it from the ship. I then thought it but the fancy of a diseased brain, for when Lilian came back to me, delirious, it was with empty arms, and not till long after did she mention a child."

"Oh, great Heaven!" groaned Gustave Laurent. "What sufferings, what misfortunes! I need not tell you more about myself. I played the violin in the public streets until I had gathered money enough to pay my way to Lilian's country. One year ago I landed, sick and penniless, in this city. Friends I once had here, but none remembered me. I made inquiries cautiously, and learned of Lilian's return and death, long years before. Then—then I knew it was time that I died, too. But the child—the child," wildly; "what became of the child."

"If it is still above ground," answered Lispenard, "we will find it. My sister returned to America in a trading-vessel, you say. Do you know anything beyond that fact?"

"I traveled to Havre," replied Laurent, feebly, "and after a weary while I discovered the name of the ship in which my darling sailed, and that of the captain who commanded her. They are odd names. I wrote them somewhere here," fumbling again at the old wallet; "I have no other clew—God help me! Lilian sailed in this vessel with the child, but she reached your door alone. Perhaps the little one died on the passage; perhaps it was delivered to charity; perhaps——"

But his voice failed him, and at the same moment the guttering candle went out, leaving the garret in darkness. Lispenard put the old wallet in his own pocket, rose up from the side of the sick man, and groped his way out of the attic.

In a few moments he was back again, and his servant with him. While Abel Lispenard held a lamp, which he had borrowed from a room below, the coachman flung a warm carriage robe about Gustave Laurent, raised him in his arms and bore him carefully down the foul stairs to Lispenard's waiting carriage. He placed him on the soft cushions. The dwarf followed, bearing the violin.

"Drive to St. Margaret's," ordered Lispenard, and away went the blooded horses, out of the North End Street, toward the better portion of the city.

"St. Margaret's was a home for incurables, founded by Lispenard himself, and supported entirely by his bounty. A noble charity, philanthropists called it. Inside its walls Lispenard was reverenced, almost adored. There, at least, his personal deformity awakened no fear, no aversion. To the grateful inmates of St. Margaret's, he was an angel of life.

The carriage drove into a retired street, and stopped before a big, substantial building, up the steps of which Gustave Laurent was carried, and given to the care of the matron.

Lispenard went into a handsome reception-room to wait. After a while an attendant came to the door and made a signal. Lispenard hurried to the warm, bright, luxurious chamber which had been assigned to Lilian's husband.

He found the man against whom he had, in past times, breathed so many vows of vengeance, resting in a great, sleepy hollow of a chair, his violin across his knees. He had been fed with soup and wine, and warmed and comforted. The tense lines of his face seemed to have relaxed somewhat, but he still looked as though death had smitten him. As Lispenard appeared, he slipped out of the deep chair, and, in a transport of gratitude, fell on his knees before the dwarf.

"For God's sake, do not kneel to me!" cried Lispenard, lifting him quickly, and putting him back in the sleepy hollow. "Now listen. You shall never want for anything again. In this place you will have trained nurses, the best medical attendance, and it shall be my care to see that your every wish is gratified. My old anger against you is dead. I am now your friend, your brother. Would to Heaven that you had sent for me before!"

"The child! the child!" gasped Gustave Laurent; "how shall we discover the fate of Lilian's child?"

"Leave that to me," said Lispenard. "I must have time to think, and you are too weak to agitate yourself further."

"Look inside the wallet," pleaded Laurent; "read the names of the ship and her captain—they may be known to you."

Lispenard obeyed, then shook his head.

"No; I never heard of either. Be calm. Your child, if it still lives, is Lilian's heir. Trust the whole matter to me. To-morrow I will come to you again."

He left Laurent sobbing like a woman, and drove away from St. Margaret's.

As the carriage turned into Washington Street and approached the vicinity of the theatres, a jam of cars and vehicles brought the horses to a walk. An elegant coupé passed, then halted abruptly; light fingers tapped the glass door and beckoned, imperiously. Lispenard knew that he was recognized. With becoming resignation he alighted from his own vehicle and paused on the curbstone, against which the coupé had stopped.

"Oh, I am so glad—so glad to see you again!" cried Nina Berkely, extending a little, trembling hand.

She sat inside the carriage, with a cloak of silver fox-fur covering her magnificent evening dress, a great light flaming in her brunette face, her eyes dewy, her lips quivering eloquently.

"Surely, Mr. Lispenard, you are coming to town this Winter?" she faltered; "we miss you very, very much."

"No," he answered; "I shall remain at the Dale."

"Shut up, like an owl, in your tower? Fie! Society seems very dull just now—hollow, insufficient. Come back to us! Can nothing lure you from your retreat?"

Here was a woman who had loved him long and hopelessly, one to whom his deformity was beauty—a woman who was constantly beseeching his attention, his pity. She was young, handsome, well-bred. Could he ask or hope for more than this? She loved him for himself alone, not for his money or position. He had only to hold out his hand, and she was ready to enter into his lonely, loveless life, and enrich it with her womanly grace and tenderness. And knowing all this, Abel Lispenard stood there in the lighted street, and looking straight into her dewy, imploring eyes, answered, with pitiless coldness:

"No, nothing!"

"Oh, I know what it is that keeps you at the Dale, Abel Lispenard," she half sobbed, in a voice full of jealous passion; "it is that girl Mignon!"

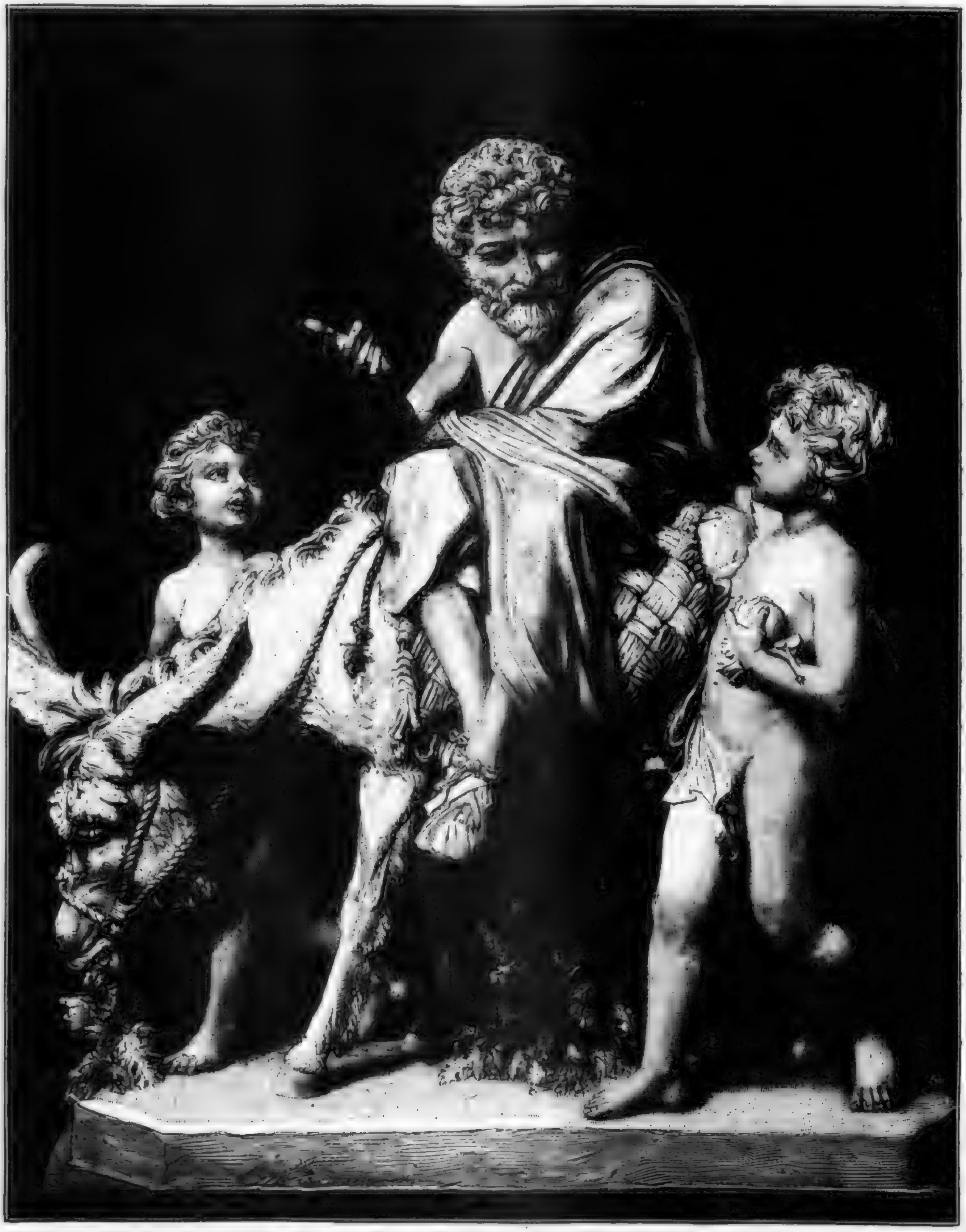
"Good-night, Miss Berkely," said Lispenard, lifting his hat. Then he climbed to his own carriage, gave the order to drive on, and, sinking back among the cushions, covered his face with his hands.

XUM

The coachman drove back to the Dale. His dogs, at least, were there to bark a loving welcome. Before entering the tower, Lispenard stood under the gloomy evening sky, and looked across to Rookwood, as a devotee turns to give a last look of deep homage to the shrine of his worship.

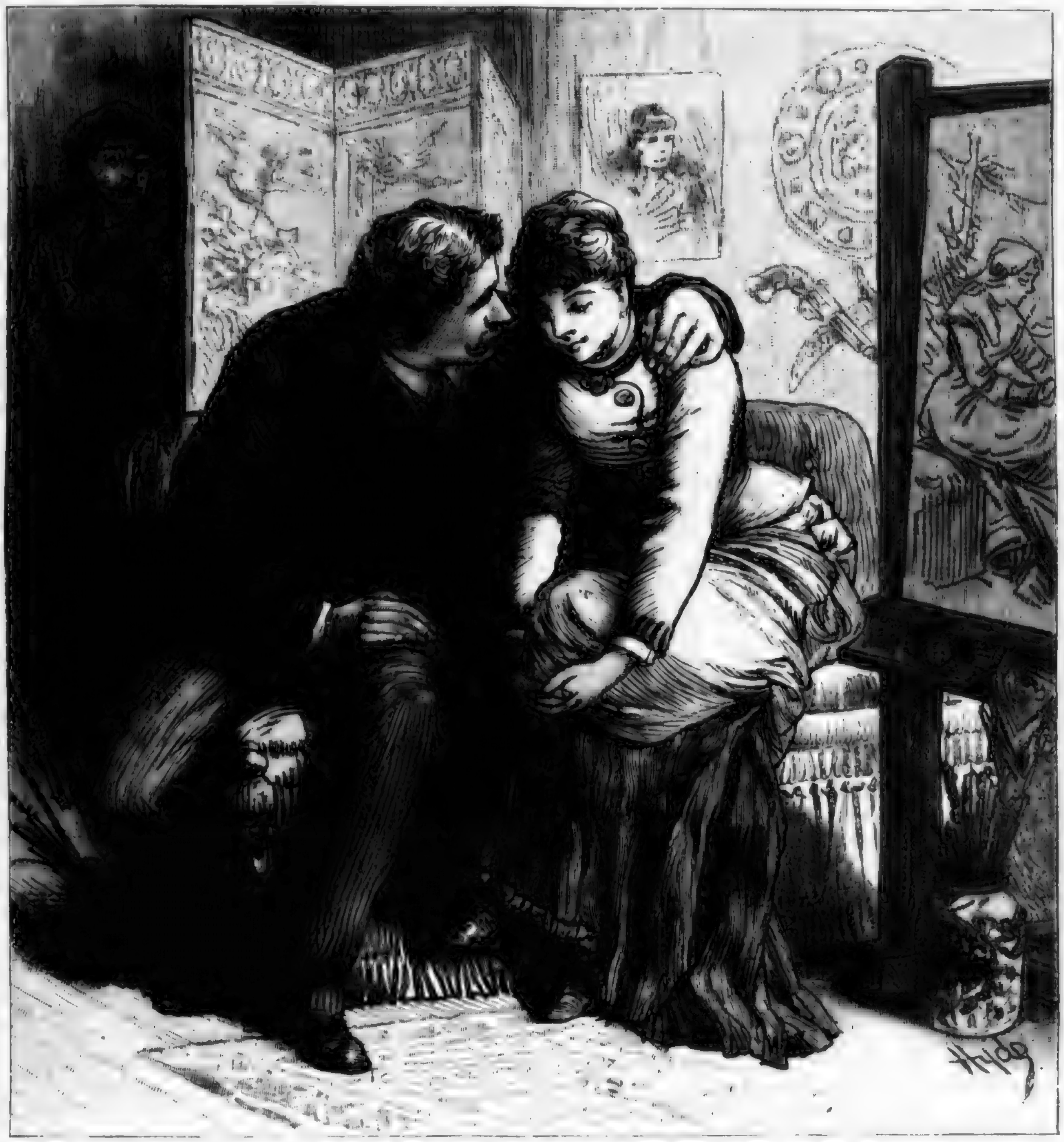
Then he went into the house.

(To be continued.)



ÆSOP AND HIS FRIENDS.—FROM A GROUP BY HENRY MÖLLER

Perfumes as Preventives of Moldiness.—Moldiness is occasioned by the growth of minute vegetation. A clove will preserve ink. Any essential oil answers equally well. Leather may be kept free from mold by the same substance. Thus, Russian leather, which is perfumed with the tar of birch, never becomes moldy; indeed, it prevents it from occurring in other bodies. A few drops of any essential oil will keep books entirely from it.



BARBARA.—"'BARBARA, I LOVE YOU, DEAR! WILL YOU BE MY WIFE?' A MAN—A SAILOR—HAD ENTERED THE STUDIO, AND STOOD IN A DUSKY CORNER UNOBSERVED. HE HELD HIS BREATH TO HEAR HER REPLY."

BARBARA.

By Mary Wakeman Botsford.

"Sept. 22d, 18—: Off Cape Blank Light, latitude —; longitude —. Dreadful homesick."

The lines were written in a rude, unformed hand, on the fly-leaf of an old Bible. Its pages were brown with age and discolored with sea-water. They were dog-eared, too, and here and there one was turned down and marked faintly with pencil along the well-thumbed margin.

Two women were sitting by the window of the living-room, which looked seaward, with the book open on the sill before them. They seemed to have forgotten it for the moment, for the elder woman's needle clicked vigorously and the younger one's eyes had wandered off to the dim sea-line, which looked gray like the clouds above it. The man outside stopped painting and regarded the girl intently from beneath the brim of his soft hat. It was not the first time that he had let his brush lie idle that he might look at her, for she seemed to be never twice alike. Her luminous gray eyes, clear, pale face and low forehead, shaded by loose rings of red-gold hair, seemed in keeping with the soft, low-lying sky, the neutral tints of the weather-beaten houses and misty stretch of sea. Her hands, loosely folded in her lap, suggested quiet after a storm, and something in her passive figure as she leaned a little forward, gazing at the quiet sea, helped the fancy.

He would have liked to sketch her as she sat thus, but he had discovered in the time they had spent under the same roof that she had no desire to be put into his pictures, as if she were a rock or a bit of sky.

"Eliza Trevor will sit for you," she had said, curtly, when he had asked her, soon after he came to N——, to give him a half-hour. "She likes it; I don't."

So to Eliza Trevor he had gone, and she figured in several of his finished pictures as a fisher-girl upon the sand, looking off over the sea, her eyes shaded by her hand; again, with a child in her strong, sun-browned arms, and an overturned dory for a background. But while these were good work, they did not satisfy him as did the pictures he had never painted, in which you might always find the one model, who by no entreaty could be induced to sit for him.

He should leave on the following week, and he was more unhappy than he could have thought it possible to be three months before.

But there was nothing to keep him longer on the lonely little sea-washed island. The equinoctial storm was over; he had caught some fine effects of that, and October was nearly gone. He had seen the golden-rod change from slender, green stalks into plumes of pale yellow, deeper gold, orange and russet. Purple-asters and the white-everlasting starred the long meadow at the lower end of the village, and already the fisher-folk were gathering driftwood for their Winter fires.

Yesterday he had been out on the marshes and seen flocks of birds flying south. A sea-gull rose with flapping wings from the surf and flew so close to him that he could see the fish gleaming in its talons and hear the shrill cry cleaving a tenuous track through the keen air. It seemed to say that the idle Summer days were over, and Winter, with hard work and scant sunlight, near at hand. He should miss the windy sunsets and the wonderful variety of the marshes dotted now here and there with ricks of hay, the breezy outdoor life, the island merry-makings at which he had been always welcome, the rough kindliness of the fisher-folk—all these, and more! He should miss Barbara Baldwin's pale face, with its unfathomable eyes and crown of Titianesque hair. If she had been like the rest, he might have gone back to his work with only a pleasant memory and the natural regret one would have at leaving a place where one has been happy.

She had first attracted him by her wonderful beauty, then by her seeming indifference, which piqued and puzzled him. She had seemed to have no lovers. The men were for the most part rough fishermen, with eyes blue like the sea and faces tanned and hard. On shore they smoked and told sea-yarns, sitting on their overturned dories, or planted their little patches of garden.

Barbara's aunt was like the women of the place: hard-working and homely of speech, with the grim humor and kindliness which one finds in the New England character, as unexpected as the lichens which clothe their rocks, or the sunlight of the golden-rod upon their sterile coast meadows.

Mr. Vance had been at a loss to account for the girl's gentle ways. She seemed like some rare flower blossoming in the salt marsh, a wonderful seed blown from some far country and nourished into buoyant life by the island air and sunlight. For though pale, she was hardy as a young oak; and when she walked across the sands or pulled her dory around the rocky point on which her house stood, one stopped involuntarily to watch her.

After the first few weeks of his stay, Vance seemed to have broken down the outposts of her reserve. Though he might not sketch her, she often accompanied him on his expeditions by sea and shore: and sometimes she would take the oars from him and pull the heavy dory with her strong young arms, while he watched the faint color ebb and flow under her clear skin, and the soft rings of hair curl more closely about her temples like the tendrils of some delicate vine.

One day they had been out together until after sunset. As they walked up the narrow, shell-bordered walk leading to the cottage, Barbara's aunt came hastily forward to meet them.

"He's here," she said, abruptly addressing Barbara. "An', Bar'bry, he's goin' away again to-morrow." The elder woman hesitated and crimped her apron hem with nervous fingers. "I wish, Bar'bry, you could cheer him up a little—he's dre'dful upset."

Barbara brushed by her aunt, and went into the house. She had grown paler, and her eyes shone.

A tall, well-made fellow, evidently a sailor, stood by the mantel in the little room, and made a step forward with an eager exclamation as she entered. Vance went on around the house to clean his brushes and palette. He could hear a subdued murmur of voices, and occasionally distinguish Barbara's clear, low tones. The voices ceased and steps sounded on the porch and down the path. In the thick, sweet-scented dusk two figures passed out of the gate. One was Barbara, the other the sailor. They walked slowly, and before they had gone far a soft fog creeping up from the sea closed in around them. Mr. Vance shut the lid of his paint-box with an impatient snap, lit a cigar, and paced up and down in front of the cottage. The fog gave him a sense of isolation, and with it he was conscious of a feeling of personal loss. He had thought of Barbara growing up alone on this remote island, which seemed to have thrown a spell around her. She was like a jewel—embedded in the stern New England rock—the more precious in that he had discovered her. Was it not for him, after all, to give the jewel a fitter testing?

He threw away his cigar as he heard her step near the house. She had been gone over an hour, and was coming back alone. He went out to the gate to meet her, but the words he had meant to say died on his lips as he saw her face.

It looked gray in the uncertain light. The fog wavered around her, quenching the brightness of her hair and deepening the shadows under her eyes, which he had always counted one of her chief charms. When she saw him she drew back a little, then recovered herself and walked toward the house. Her aunt stood in the doorway, her angular figure outlined like a silhouette against the lighter background. Barbara took one of her hands in both her own, and Mr. Vance saw that a ring shone upon her finger. She stooped and very gently kissed the elder woman.

"Why, Bar'bry," said her aunt, surprise, joy and incredulity in her tone, "you ain't give in at last, have you?" Her eagerness was almost pathetic, and she stroked the hand softly which wore the ring.

"Yes," said the girl, slowly, as if with an effort. "He goes to-morrow, and he told me to say good-by to you for him, and—that he was happy."

"They wa'n't no need of tellin' me that," cheerfully. "You'll make a man of him, Bar'bry, an' I can quit worryin' at last. But, land, child, you're pale as a ghost. Let me make you a cup of tea. You must be chilled thro' out in that fog."

Barbara moved a little out of the lamplight when she spoke.

"No, I am not cold; only tired. I guess I'll go to bed. You can shut up the house. The east window rattled so last night; maybe you could tighten it with a piece of wood? I feel as if I couldn't stand the noise to-night!"

She took the candle languidly from the high mantel, and moved toward the door. Her aunt followed her, and at the stairway, as if by a sudden impulse, kissed her pale face.

"There, child," she said, irrelevantly, "I—I hope you won't never regret it."

When Mr. Vance came in later he found her whittling a piece of wood for the window with a kitchen-knife. She looked up quickly as he entered and made a rapid survey of him. A troubled look came into her eyes.

"Bar'bry's gone to bed, an' I'm goin', too," she said, grimly. "There's your candle. You can put out the lamp when you're ready, an' don't forget the front door."

* * * * * *

Barbara's romance, if it could be called a romance, was short-lived. She had yielded to her cousin's entreaties for an engagement because he had said that only her love could save him from ruin. Yielded not for love of him, but of his mother, her aunt; the only mother she had known.

His vessel sailed the following day. A week later it was wrecked with its crew, and the only trace of the wreck found was the old Bible which Barbara had given him before their engagement. It lay now upon the window-sill before the two women, open at the last entry which the sailor had made.

Barbara had been silent for some time, and Mr. Vance wondered what were her thoughts as she sat with the twilight coming down around her like a vail.

"I have made up my mind," she said, finally; "I must go. Jane will stay with you as long as you want her, and you will not be so lonely except at first. I can get along someway in Boston. I feel as if I couldn't stand another Winter here."

She spoke with repressed energy. Her aunt pulled one of her needles out of the ball of yarn on her lap and ran it meditatively through her hair.

"Well, Bar'bry," she said, "I won't put no obstacle in your way. You've got enough for your fare, an' to keep you till you get a place, you know"—simply. "You've got a home here to come back to when you get tired. I don't like your bein' alone in a big city. If Enoch had a-lived"—here her voice broke, but she steadied it and went on, firmly—"I'd calculated to go to Boston with you, if you'd wanted me, and we three could have lived together."

Barbara's face softened. There had always been a kind of reticence between her and her aunt, and anything in the nature of a confidence from either was rare. Mr. Vance had gone away from the window, feeling that he had no right to listen to the conversation within, but his pulses throbbed at the thought of Barbara's being in Boston alone, knowing no one there but himself. She was free now and he—loved her.

When he came back to the house she was sitting by the table, already assorting some clothes which her aunt, with subdued eagerness, was packing in a dusty hair trunk.

"When do you go?" he said, looking down on Barbara, and marking the soft splendor of her hair in the lamplight.

"To-morrow," she replied, without looking up.

"You know that Boston is my home, and that I should like, if I might, to see you there. When you are settled, if you will send a card to this address"—laying his own card on the table beside her—"I will come. Promise me that you will not forget?"

"You are very good, but I—I cannot see how we could continue our acquaintance in the city. Our paths lie in a different direction." She added: "I may be a nurse-maid, perhaps a shopgirl, and you——"

"And I am to lose a friend because of such a whim?" he interposed, warmly. "That is unkind and unlike you! Promise me"—and his voice was dangerously eager—"that you will send for me?"

"If it seems for the best, I will let you know where I am."

This was all she would say, and he was obliged to be content. Two days after she was gone, and a week later Philip Vance bade Good-by to the island with less regret than if he had left Barbara there.

PART II.

THE painter sat before a glowing wood fire in his studio, the smoke from his cigar curling up softly into the intermittent gloom. Now and then the burning logs, flashing more brightly, revealed shadowy corners hung with tapestry, the glimmer of old armor, glimpses of satin shoes and heaps of silken stuffs piled up on the shining floor.

An occasional gust of snow beat against the low wide windows.

A cup of coffee, untasted, was at Mr. Vance's elbow, prepared by his servant, and set there a half-hour before. The quaint little clock on the mantel struck six—low mellow strokes, which entered into rather than interrupted his musing.

"November, December, January, February, and yet no word of her," he thought. "Only that chance meeting on the street two months ago, and my promise not to seek her. If I had not promised! Who knows what need she may be in? She looked ill then, and I could swear I saw tears in her eyes. My proud Barbara. If you knew how I love every line of your tender face, how glad I should be—— Hello, come in!"

"Which means, if the tone goes for anything, 'stay out,'" replied the newcomer, feeling his way cautiously around the pile of stuffs, Renaissance chairs and *bric-à-brac* which impeded his progress. "Why don't you get some furniture in your rooms?" Jack Jones added, half stumbling over an ottoman.

"Confound you, Jack," said Vance, genially; "why didn't you tell me who it was? I thought it might be Lanier, and you know what a bore he is, especially at this time of day. Sit up to the fire and we'll have some lights."

"Cold coffee, logs burned down to ashes, cigar out. Fortunate I came in as I did; the room's like a barn. What's the matter? Been seeing ghosts or angels? How I wish I could sketch you! Pose, properties and all couldn't be improved. Call it 'The Vision of Sir Philip.'"

"Shut up," his friend interposed, tersely, ringing for lights and coffee.

"Put on another log and unburden yourself. Of course you've got some news."

"Well, yes," unabashed, "I have."

"What is it? Sidney engaged to that English girl. What's her name—the Hon. Elfrida Jane Pandjandrum?"

"No, it's about myself," seating himself astride a thin-legged, plush-covered chair. "Vance, I'm in love."

He paused an instant, but his friend only puffed a cloud of smoke lingeringly into the air and offered no comment.

"The most beautiful girl you've ever seen. Under the same roof with me. Meet her three times a day, and get more desperate every time."

"How long since?" Vance queries, lazily.

"She's been at the house exactly a week—and such a week," drawing a long sigh.

Recalling himself by an effort from thoughts of Barbara to the object of Jones's adoration, Vance asked again, patiently:

"What's her style?"

"One of Fra Angelico's saints. Clear, pale face; eyes the color of the sky at night before the moon rises—purplish gray—with black lashes; hair, oh, indescribable, man—dull-gold with imprisoned sunlight in it, a glittering net to catch men's hearts in. Circe's web, everything that's glowing and glamourous and—— Look out, you're spilling your coffee. Oh, I don't mind the coat, but it's a pity to spoil that Watteau face. Her name? Lovely and uncommon, like herself; Barbara—Barbara Baldwin. She's governess for my sister's children—nursery governess, you know. Congratulate me? Well, that's a trifle premature, but thanks all the same. Did you say you'd met her?"

"I thought I had seen some one like her," Vance replied, quickly holding a feather screen before his face, but, singularly enough, between himself and his friend, instead of the fire. "Just a coincidence, I dare say."

"You'd never forget her if you'd seen her once!" Jones said, confidently. "She's by all odds the most beautiful girl in Boston to-day, and so different in every way from the regulation girl. Thank Heaven, my sister got her before you artists found her out. I've no notion for having her head *posed* and raved over by you fellows!"

"Of course she agrees with you?" Mr. Vance remarked, dryly, with a shade of irritation in his tones. "You speak of her in such a proprietary way, I fancy my congratulations come none too soon!"

He rose as he spoke and buttoned his coat, looking down from his full height upon Jones's chubby figure and round, good-humored face.

"Oh, well, you know I didn't mean—— Why, confound it, you and I are not fools!"

"I'll speak for myself," murmured Vance, inaudibly.

"She's poor and unknown; I love her, and mean to ask her to be my wife."

"An honor she'd scarcely refuse, considering your eligibility. Well, it's time to dine. Will you go with me?" abruptly.

"Thanks, no; I'm due at home. Miss Baldwin comes in the drawing-room for a half-hour after dinner. I shouldn't want to miss her. By-the-way, come round and see us. My sister was wondering what had become of you."

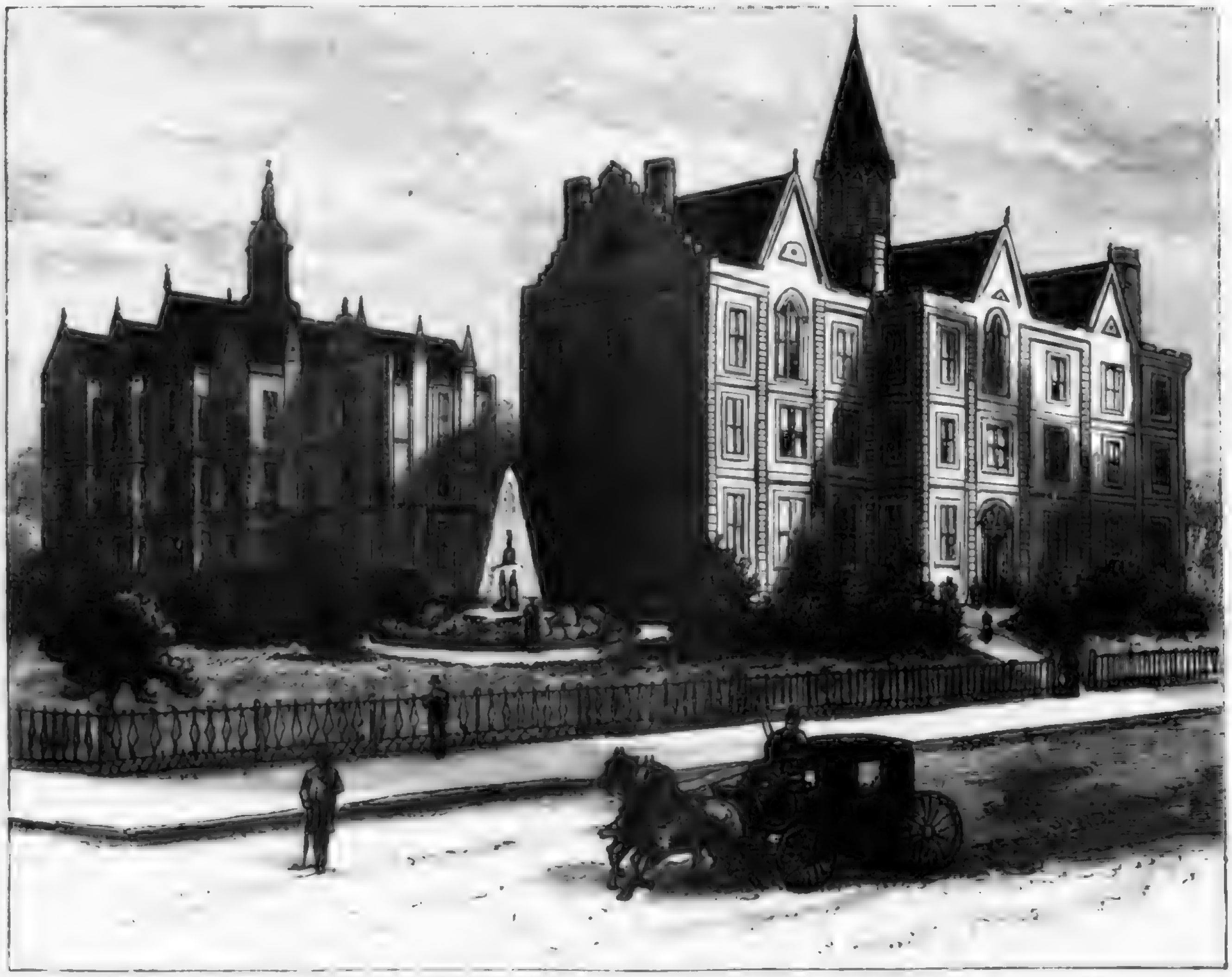
"Oh, yes; I'll come," replied Vance, in a significant tone, that was lost on his companion. "I've forgotten Mrs. Keith's day, though."

"Thursdays. Sorry Miss Baldwin doesn't appear on those nights. But you can drop in any time, you know."

"Oh, thanks!"—in an exasperated tone. "Good-night! And go to thunder!" he added under his breath, as the two men parted at the corner of the street.

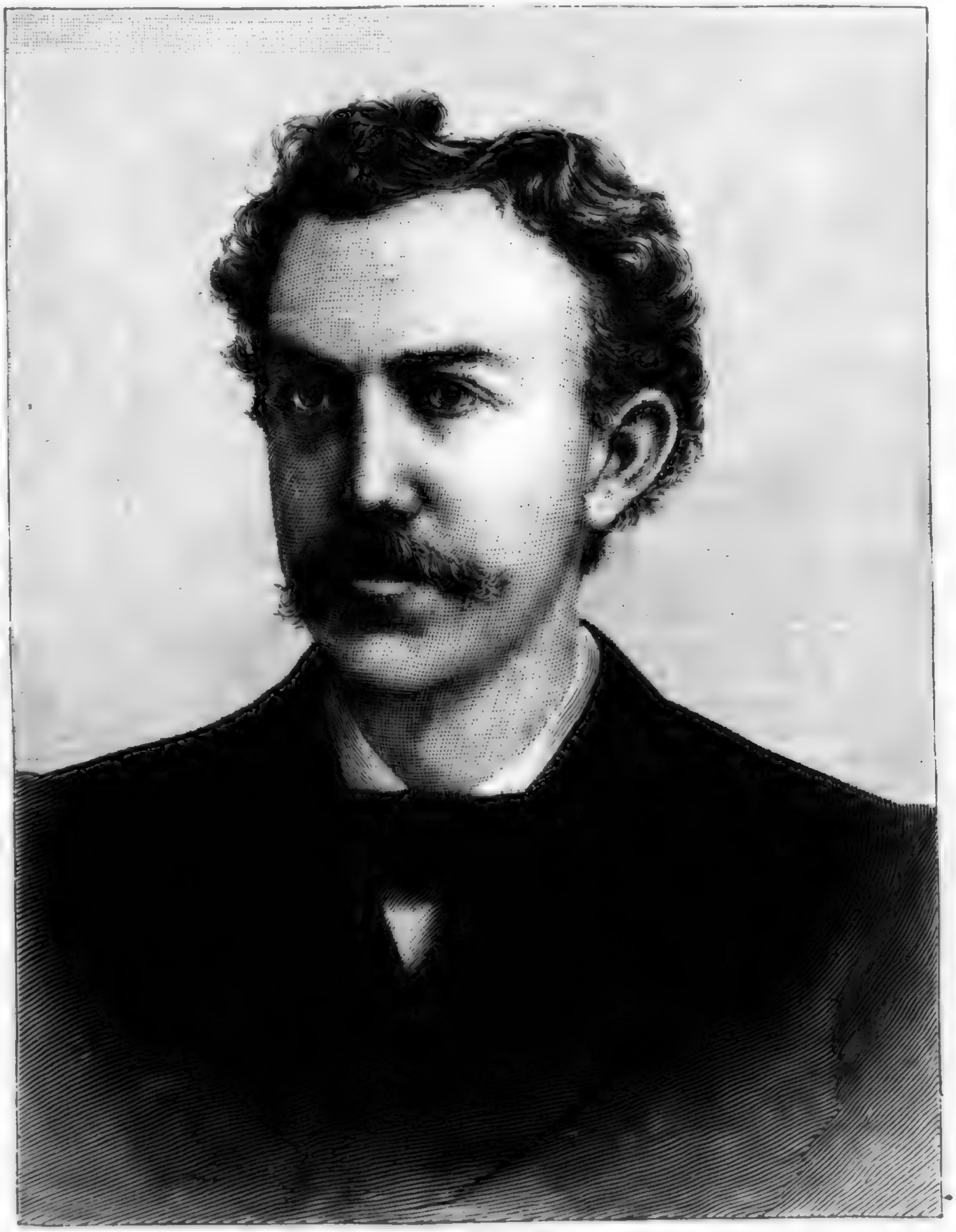
* * * * * *

"You have met Miss Baldwin, then," Mrs. Keith asked,



HIGHER EDUCATION IN INDIANA.—INDIANA UNIVERSITY.—SEE PAGE 87.

and there was scarcely so much of interrogation as assertion in her question. She was sitting *tête-à-tête* with Philip Vance in her drawing-room at the close of the bleak February day. In an adjoining room, dimly seen through the fading light, Barbara and Jack Jones were talking. Vance could see Barbara's head and profile outlined against the pale-green satin hangings of the room. He had been glad of the chance to see her in such a fitting environment, and, now that the first rapture of meeting her was over, he was content to watch her from a distance, letting not a turn of her head escape him.


DAVID S. JORDAN, PRESIDENT OF THE UNIVERSITY OF INDIANA.

"I beg your pardon! Yes; I have met her before."

"She is very reserved?" Mrs. Keith said—this time with the interrogative inflection.

"Yes; that is a woman's privilege."

"But scarcely of a woman's in her station. Frankness disarms suspicion, you know. She is so beautiful that she has added need for candor."

"Then I understand you to say that she is untruthful?"

"Oh, no; not that exactly," in a genial tone that some women reserve for saying disagreeable things. "She always answers direct questions, but one does not like to be thought curious."

"Not even when one *is* curious?" Vance queried, gently.

Mrs. Keith shrugged her graceful shoulders.

"My interest in her is purely philanthropic, of course. I am sorry, though," she added, naïvely, with the air of taking Mr. Vance into her confidence, "that my brother is curious."

If she had thought to penetrate Mr. Vance's armor of indifference, she had succeeded.

"I shall be glad when poor Jack gets over the susceptible stage. It is so distressingly commonplace to fall in love with a governess; and when the governess is beautiful, why, it's still more commonplace."

Philip felt himself growing quite warm under his hostess's easy scrutiny. He rallied, however, and replied, smiling:

"Love is a commonplace sentiment, you know. I should scarcely think that you and I would be reduced to talking of it."

Barbara had left the room unobserved, and Jack entered here. The conversation drifted into indifferent topics, and shortly after Vance left.

He was scarcely out of the room when Jack addressed his sister, vehemently:

"Have you dismissed Miss Baldwin?"

"No."

"She is going away."

"Then"—jocularly—"it would seem that she had dismissed me. When is she going?"

"Next week."

Mrs. Keith marked her brother's discomposure and laughed—a low, amused laugh.

"It cannot be that she has dismissed you too?" she asked, doubtfully. "No, you need not tell me," she added, looking over her shoulder at him as he stood in the middle of the floor, excited and angry.

"Mr. Vance should have waited a few moments," she reflected. Then, in her low, well-bred tones, which robbed the words of their harshness, she murmured as she closed the door: "What fools men are!"

* * * * * *

Philip was standing before a nearly completed picture, the result of a dozen sittings that Barbara had given him, when Barbara herself entered. His heart beat quickly, and despite his outward calmness, there was a thrill in his voice when he greeted her. This was to be her last sitting, and it was the day he had chosen to tell her that he loved her.

She had come to him voluntarily, after leaving Mrs. Keith, and had offered to sit for him, explaining in her grave, shy way that she needed all the money she could earn, not only to support herself, but her aunt, who by some unexpected reverse had been obliged to come and live with her in Boston.

It was the first time she had come to him unaccompanied by her aunt, and the rare fact of their being alone together seemed auspicious.

She stood a moment beside him looking critically at the picture, saying, at length, with soft seriousness :

"It is very beautiful, but I do not look like that."

"No," Philip replied, his pulses tingling as he touched her hair. "So—the chin a little lower," he added.

He was thinking how useless it was for any artist to try to express her loveliness as she sat in the quaint, low-backed chair before a spinning-wheel, the sun slanting from a big window, and adding a new glory to her hair.

Their intercourse had grown to be so frank and friendly, that his reply did not seem to her abrupt nor cavalier.

But there was a change in him to-day. She felt rather than said it, and it filled her with a vague alarm.

This was to be her last sitting. The picture finished, he could have no further need for her, and she must go away, perhaps never to see him again. With the thought came a dull pain at her heart, which she stifled bravely. At all events, she was Enid to-day—the Enid of his creation ; and to-morrow—well, after all, to-morrow *was* to-morrow !

"Do you remember my reading Enid to you at the Island ?" Philip asked at length.

"Yes, I remember. It was over by the lighthouse."

"I should like to go down there again in the Winter," he went on, musingly. "Sometimes of an evening I see a picture in my log fire. The lighthouse, and the gray sea beating around it, a low, gray sky overhead, with a a long, pale streak of yellow off to the West. There are two people in the quaint octagon room of the keeper's, looking over the sea. They stand by the window until the yellow fades out of the sky, and the light from the tower burns a ruddy track across the water. Then, in the dusk they draw up to the fire and talk softly together."

He painted on for a moment in silence. Barbara's hand trembled on the wheel. The sunlight had left her hair and crept down to her feet. Her head was in shadow now, but her eyes shone dark and clear like water in the depth of some cool fern-fringed well.

"There is another picture, a different one, which I see when the logs burn more brightly," he resumed. "The same people are slipping swiftly through a Venetian canal. It is moonlight, and the sky is soft and blue as only a Venetian sky can be. The water lapses musically against moss-grown marble steps and along the sides of the gondola. The people do not talk now, but a bell from a distant tower strikes softly, like an echo to their happy thoughts."

Forgetful of her *pose*, Barbara's head drooped low and lower. He was in love with some one, then ; he was going abroad, and chose this way of telling her. It seemed to her that it would have been better not to have known to-morrow was so near ! But why should she not be glad that he will be happy. He could never be anything to her ; and yet——

She buried her face in her hands. The clock on the mantel told six strokes in its mellowed, far-away tones. She seemed to hear the rushing of water.

Philip watched her gravely; then, throwing aside his palette and brush, came toward her, taking her bowed head gently in his hands.

"Do you like the pictures ?" he said.

"Yes," she faltered, but looking up bravely. "I hope you will be very happy !"

"Not unless you love me," he said. "Look up, darling ! Do you not know who that other one is, whom I have seen in my ember pictures ?"

"You cannot mean——"

"That it is you ? And who could it be, then ? When I first saw you, serving me with such shy grace at your aunt's table, I said, like Geraint, 'Here by God's rood is the one raised for me.' Barbara, I love you, dear ! Will you be my wife ?"

The door closed softly, but neither heeded it. A man —a sailor—had entered the studio and stood in a dusky corner unobserved. His face was very pale, and in his eyes there shone an agony of renunciation. He held his breath to hear Barbara's reply, which came low, but clear. A soft knell of despair to him—of hope and joy to Philip.

"I have loved you always, I think," she is saying.

"And your cousin ?" Vance queries, evincing a jealous eagerness.

"Why should we speak of him now ?"

"But tell me. Would you leave me for him were he to come back ?" he persisted.

"Oh, I could not lose you !" she cried, clinging eloquently to him.

There is a faint stir in the corner by the door. They do not hear it. The man bends forward, his arms outstretched, his face working in a tempest of grief.

"Oh, Barbara !—Barbara !" he whispers, huskily ; "to think that I should have come back from the dead only to die again !"

A faded leaf flutters from his hand. It is the leaf from the old Bible, blurred with sea-water, faded and torn. Barbara's name is written on it. It has been with him in the sea—that dreadful night of the wreck—and he has clung to it since with a sailor's superstition. He lets it fall now, and turns with unsteady steps, like one in a dream, toward the door. There he pauses. Barbara's head is on Philip's shoulder. She looks into his eyes, her own aglow with the love-light he has never seen.

"God bless her !" he murmurs, brokenly, looking his last upon the beloved face, as a man looks upon his dead. "And God help me !"

The door closes softly behind him, shutting the lovers into their new Paradise.

DYEING IN DEATH.

Few persons who buy a phial of that deep crimson liquid known as cochineal have much acquaintance with the singular animal to which jellies or fruit-juices owe this brilliant coloring. Beyond the fact that an insect of some sort is concerned in it, not one in a hundred of the consumers has any but a vague idea of how and when that insect is made to furnish such an essence.

The Cochinilla, or cochineal, is an insect which most people would call simply a blight. It is of the same kith and kin as the mealy-bug, black-fly, "scale," and several other such parasitic creatures, whose particular character often seems to vary with the vegetable growth upon which they find themselves developed. The plant upon which the cochineal thrives is one of the many varieties of "prickly-pear" cactus; and the history of its life, then, as managed by its human cultivator, is of remarkable interest.

The appearance of a cochineal plantation, with a full crop on, is perhaps the last thing that an ordinary observer would imagine to belong to anything of commercial value. Merely rows upon rows of stunted prickly-pear bushes, with all the leaves more or less blotched and crusted with a repulsive-looking bluish-gray mold or blight. Yet a single acre of good cochineal ground has been known to let at a rental of $250 or $300 a year, and to change hands at as high a price as $5,000.

The cactus plant is raised from a single leaf, which, in countries where it thrives, is often as large as a medium-sized meat-dish, and about an inch thick. The cochineal cactus, or tuno, as the Spaniards call it, is a species with comparatively few and small thorns, yet it is not pleasant handling; and the skill with which women and children pass up and down between the rows during the operations of cultivating and gathering, is one of the most remarkable features of the work. The single leaf is merely broken off from its parent plant and stuck in the ground, when it soon begins to push new leaves round the edges. It is not allowed to flower and fruit, as this withdraws part of the nourishment required by the insect. When the plant has reached two or three feet in height, and sufficient strength, a "mother" is carefully installed on each leaf. This is the female insect, whose brood, in five or six months' time, will form the crop which the plant supplies. She is a round and seemingly legless bug, in appearance not unlike a small leaden bullet or large shot. The legs, however, are there, though very minute, and she soon gets a hold on the surface of the leaf. She is then carefully sheltered for a time from excessive sun or wet by a rag of white calico tied round the leaf; and while these are on, the plantation looks from a distance as if it had been daubed with whitewash. After a few days she will be found surrounded with the active little brood who are to form the future crop. For a week or two these new-born mites indulge their fancy to roam all over the surface of the leaf; but it is the first and last ramble of their lives. As appetite grows, each insect pierces with a strong sucker the skin of the leaf, through which it begins to absorb the succulent juices it contains. Once fixed by the sucker, it remains on the same spot, moving no more during the term of its natural life.

But there is a curious exception to this. One day, about five or six weeks after the young brood has appeared, the crop seems to be suddenly much reduced, and a number of insects are found to have disappeared. These are believed to be the males, who at a certain period of their life are provided by Nature with wings, with which they take to flight and are seen no more. The females remain until they reach full growth, when they are removed into bags or trays by scraping them off the leaf with a wooden blade. After this the plant appears yellow, flabby and exhausted, and during the remainder of the year recruits itself for the next crop. The insects are spread out in large trays consisting of a shallow, square frame of wood, backed with canvas, and in these are exposed to the sun, which soon kills and dries them. They are then put through a process of polishing, much in the same fashion as a groom polishes curb-chains, by rolling in a sack. This gives them a color which is fancied in the market, but appears to have no relation whatever either to their quality or uses. The strength of the coloring matter is amazing. A single cochineal insect, alive or dead, pinched into a large tumbler of water, immediately gives a clear, pink tinge to the whole of it.

While the fruit-gardener at home wrings his hands over the depredations of scale and mealy-bug, let us remember there is at least one sort of blight which deserves well after death, by dyeing in our service again and again.

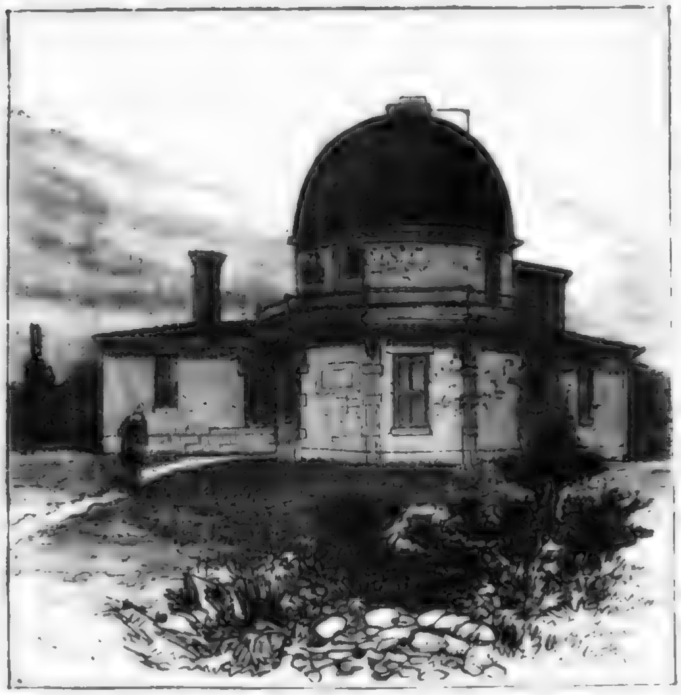
SUSPENSE.

Heart-sickness, that of old the wise man knew
  Despite his wisdom, creepeth like a pall
  Over the opulent springtime, quenching all
The sunshine, and the verdure, and the blue
Into one gray monotony of hue.
  I hear from budding boughs the thrush's call,
  From bearded spray the tinted blossoms fall
Upon the long, lush grasses wet with dew;
And all this harmony of light and song—
  These swift cloud-shadows, purpling hill and wold,
  These emerald spaces betwixt leaves of gold—
Strikes on my dull brain with a sense of wrong.
  Spring, to a sad heart, suddenly grown cold,
Seems a vain story, tedious told and long!

HIGHER EDUCATION IN INDIANA.

The University of Indiana—De Pauw University—Purdue University—Wabash College.

There is a movement at present that aims at confiding to the General Government, besides the vast and numerous powers expressed in the Constitution of the United States, that of controlling the educational establishments of the several States. The creation of a special Bureau with a Commissioner of Education was the first step, and now it is proposed to distribute among the States a portion of the national revenues, to be devoted to purposes of education. The General Government cannot well expend its revenue without obtaining control over those by whom its largess is to be applied, and without assuming responsibility for maintaining for ever institutions it may thus create. This may entail hereafter national tax for local education, and a host of questions will arise, easily settled by local legislation, but extremely difficult of treatment when laws are to be passed applicable to the whole country. The inferior or common school, a growth of comparatively few years, is not conducted on a uniform system, and perhaps cannot be. Questions arise as to the object of these schools, whether they are to be regarded as merely intended to train the children of the less affluent to obtain sufficient education to enable them to earn a livelihood, and by improving their leisure hours, rise intellectually or enjoy more intellectual recreation; or, on the other hand, is the object of these schools to prepare the young to enter higher institutions of learning and pursue a more thorough course, fitting them for learned or scientific professions? The question of moral and religious training is involved in great difficulty. Have those who desire their children brought up under a religious influence in school any rights which the Government or a majority of their fellow-citizens are bound to respect? or have those favoring a non-religious education the exclusive power to dictate to others? How far can the General Government go in creating and maintaining colleges and universities for thorough literary, scientific, legal and medical courses? Those who hold that God should not be excluded from the Constitution must hold that Government must include a divinity course as well. The whole question is one that will lead to long and serious debates before any



OBSERVATORY AT DE PAUW UNIVERSITY.

final step is taken, and Federal school commissioners, superintendents, trustees, professors, tutors and teachers are added to the existing army of national officeholders.

It is not pretended that the States, as a whole, or to a great extent severally, have been delinquent in taking proper steps to secure the children of each a degree of education suited to their position in life. On the contrary, most of the States can show how much they have accomplished in the past, and how steadily they are improving their means for affording education to all classes.

We may take up a single State to examine what it has done for higher education. There is an impression, due, perhaps, more to fiction than to any reliable data, that Indiana has been behindhand in this point.

Indiana is not a State of large cities, but mainly agricultural. Its original settlers were comparatively poor, its growth was not rapid, and it seemed to be cast in the shade by the more showy, though not always substantial, progress of some of its neighbors.

Yet the State is by no means ill-provided with educational institutions of a high rank, and an examination of the history and condition of a few of these will give the best idea of Indiana's claim to a fair fame as fostering the cultivation of the intellect and talents of its youth.

The history of the University of Indiana has been parallel with that of the State.

The University of Indiana was chartered first as a State Seminary in the year 1820, and was established at Bloomington, Indiana. This location probably grew out of the fact that one of the townships of land donated by Congress for educational purposes adjoined the site of the future town of Bloomington, laid off two years before, and to the desirability of the location itself on account of its healthfulness, and its position near the centre of the actual population of the State.

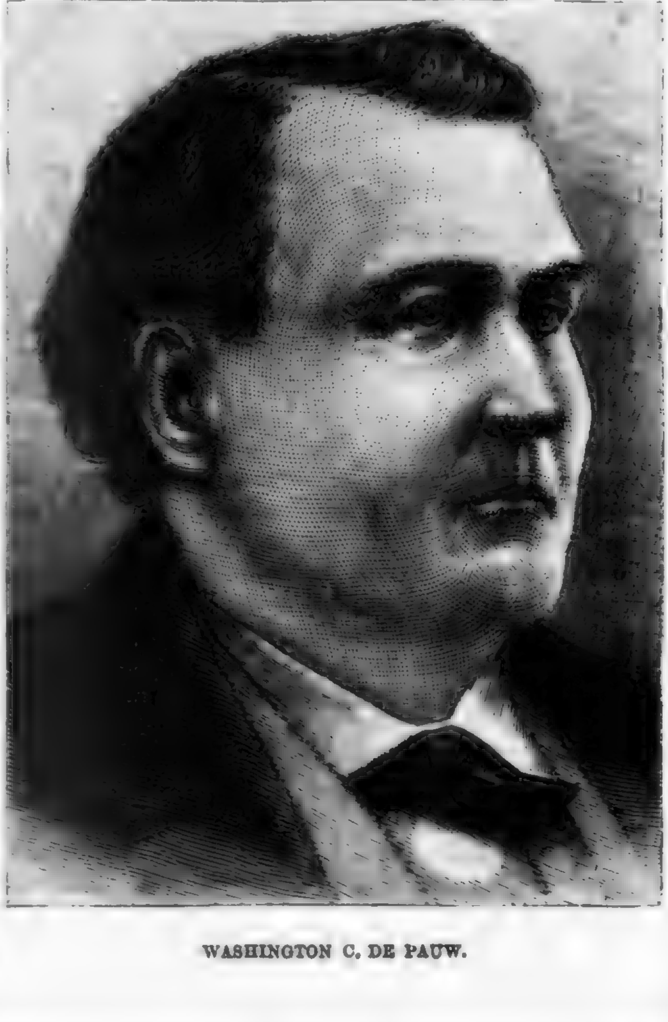
Its early history is closely connected with the efforts of two men more than all others: one the lifelong President of its Board of Trustees, Dr. David H. Maxwell; and the other, the first President of its Faculty, Dr. Andrew Wylie.

Dr. David H. Maxwell was a leading pioneer in the cause of education in Indiana. He was a wise and powerful patron when the patrons of education were few. In the second Legislature (1819) as a member of the Lower House from Jefferson County, he was foremost in the establishment of the State Academy. During twelve years of subsequent service in both Houses of the Legislature, and as a member of the University Board, his chief desire and efforts were for the prosperity of the Institution, and to his efforts were largely due its permanent establishment.

Dr. Andrew Wylie was elected President of the University in 1828, a few months after its establishment as a State institution. A log, with himself on one end and Mark Hopkins on the other, was President Garfield's idea of the true essentials of a college. Andrew Wylie was the Mark Hopkins of Indiana University, and in his life-work he well illustrated the truth that the best use of a great man is to inspire others. He was one of the sturdy characters of the old time, a thorough classical scholar, an executive officer of great ability, and a born teacher. He was regarded among the older alumni as the highest type of a college president.

The first seminary buildings consisted of two brick houses—one, for chapel and recitation rooms; the other, as a residence for the professor. The former was a two-story building 60 by 35 feet. In May, 1825, this was opened for instruction. Baynard R. Hall was the first and for a time the only instructor. In 1830–31 a more pretentious building was erected to accommodate the increasing number of students. This was burned in 1854, and upon its site was erected the present chapel building, now occupied by the preparatory department. In 1873–4 another building was added for the accommodation of the scientific departments. This new building and its contents, including the library, laboratories, museums and apparatus, were destroyed by the disastrous fire of July 12th, 1883.

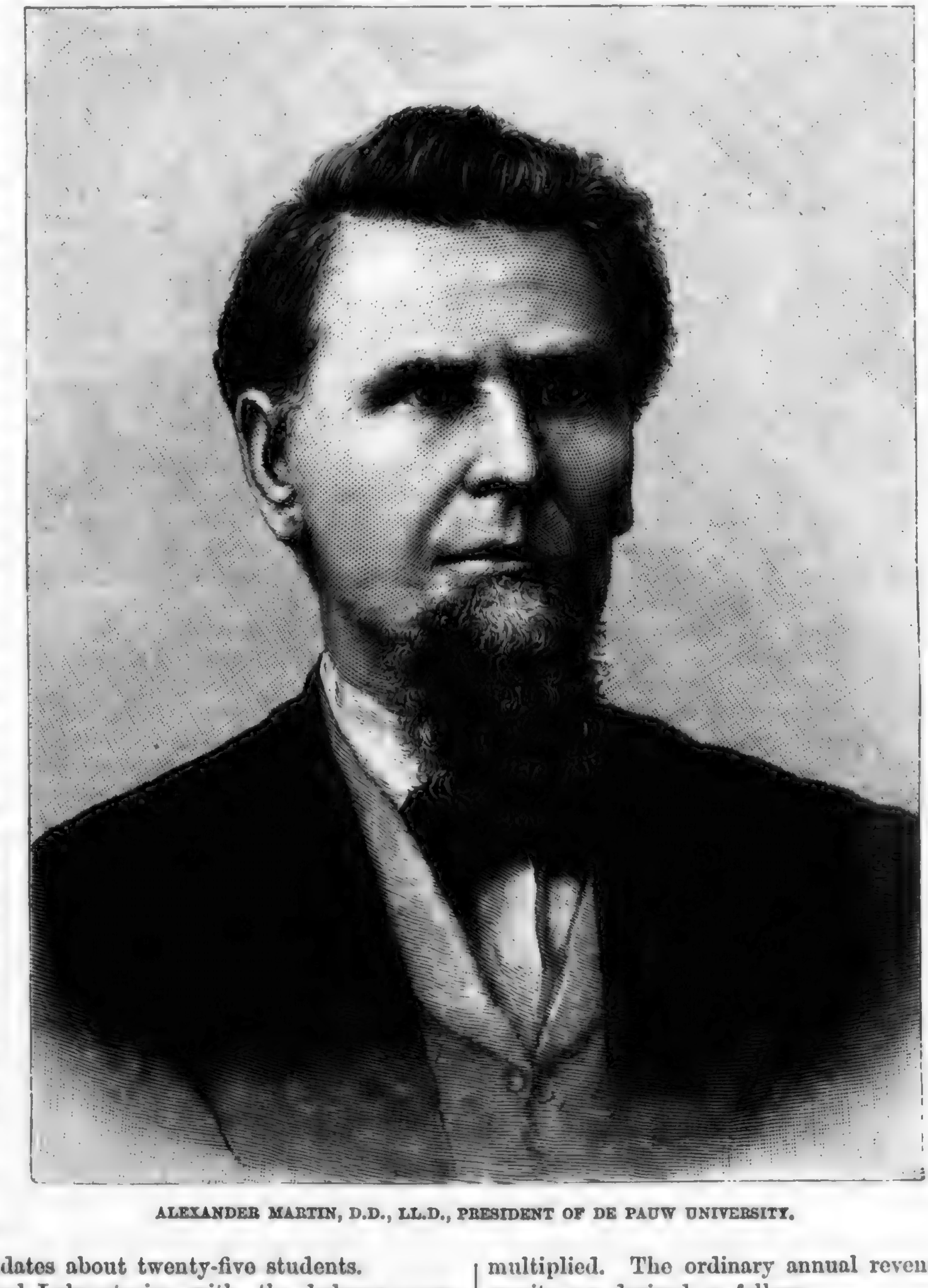
By the gifts of Monroe County and the State, together with the insurance money, three new buildings have been



WASHINGTON C. DE PAUW.

erected in a park of twenty acres on the eastern edge of Bloomington. One of them, Maxwell Hall, is a two-story frame, intended for the temporary accommodation of the literary departments. Owen Hall and Wylie Hall are two-story brick and stone buildings, occupied by the departments of mathematics, chemistry, physics, biology and geology.

The Geological Laboratory is fitted with a complete set of maps and models, and all the instruments and apparatus required for their construction.



ALEXANDER MARTIN, D.D., LL.D., PRESIDENT OF DE PAUW UNIVERSITY.

The Photographic Laboratory, connected with the department of geology, is furnished with everything required for the scientific uses of photography.

The Entomological Laboratory is supplied with about 8,000 specimens, the Indiana Collection being especially rich.

The Biological Laboratory is supplied with about 23,000 specimens—collected since the fire—with the necessary instruments for biological research, and with a reference library, which, in the department of ichthyology, is absolutely exhaustive.

The Physical Laboratory accommodates about twenty-five students.

The Chemical Laboratories, with the balance-room, drying-room, assaying-room, furnace-room, offices and store-rooms connected with them, occupy the basement and first floor of Wylie Hall. There are four of these laboratories: a qualitative laboratory, allowing 872 cubic feet each for 44 students; a quantitative laboratory, allowing 952 cubic feet each for 28 students; and two small laboratories for special work. These laboratories have been arranged according to the best approved plans, and the facilities afforded are nowhere excelled.

The Museum contains about 33,000 specimens of birds, fishes, invertebrates, fossils, minerals and casts. This includes 5,500 specimens of the David Dale Owen collection of fossils and minerals; 2,500 fossils, minerals and lithological specimens, collected by Dr. Branner in South America; 12,000 fishes (the third largest collection in America); and 2,000 birds collected by Dr. Jordan and his associates. The rapidity with which the collections of the University have grown is due largely to the relations which the heads of the scientific departments hold with institutions and collectors throughout the world.

During the past year about 3,000 volumes have been added to the University Library, and $2,000 will be expended for it during this collegiate year. The destruction of the late library of 15,000 volumes was, indeed, regrettable, but the possibility of choosing a library anew enables the University to select one entirely suited to its demands. Not the least desirable feature of the library is the system by which it is as open to students six days in the week as their private libraries are. By this liberal plan, the value of the books is many times multiplied. The ordinary annual revenues of the University are derived as follows:

Permanent appropriation provided by statute..	$23,000.00
Interest on endowment fund accumulated from sale of lands received from the Government....................................	6,000.00
Interest on State bond issued on account of special endowment fund tax............	3,000.00
Interest on unpaid purchase money due on lands..	400.00
Students' fees (contingent and library), about...	2,500.00
Graduates' fees for diplomas about	100.00
Total about............................	$35,000.00

XUM

The Legislature passed an Act, in 1883, providing for the permanent endowment of the University by levying a tax of one-half cent on each hundred dollars of taxable property in the State, to be collected annually for thirteen years. This fund, it is estimated, will amount to about $750,000.

Endowments, buildings, apparatus and books are undoubtedly incidental necessities to an institution of learning; but, after all, it is the men in a college Faculty that are its essential features and give it rank. Since its first charter the institution has possessed among its Faculty men who have given it power and distinction. Besides the first President, Dr. Andrew Wylie, his successors, Dr. Darley ('52–'59) and Dr. Cyrus Nutt ('60–'75), Dr. T. A. Wylie, Professor of Physics, a graduate of the University of Pennsylvania, has been connected with the institution since 1837. In his nearly half a century of labor he has taught most subjects embraced in a college curriculum. At several different times he has served as temporary President of the University.

Contemporaneous with Dr. T. A. Wylie, was Dr. Richard Owen, for many years Professor of Natural Science. Dr. Elisha Ballantine also served the University with distinction for more than a generation as Professor of the Greek Language and Literature.

David S. Jordan, now President, to whom the reorganization of the University is mainly due, is a graduate of Cornell, and early made a reputation as a botanist. After studying under Agassiz and filling the Chair of Science in Lombard University, he showed his scientific treatment of zoölogy in his "Manual of Vertebrates," and his "Synopsis of the Fishes of North America." That within twelve years after graduation he could establish so wide and solid a reputation is remarkable, and it is conceded that as President he entirely justifies the choice of those who selected him.

Another distinguished light of the University is Professor Daniel Kirkwood, a native of Harford County, Maryland. After filling the position of Professor of Mathematics in Delaware College and being President of Washington and Jefferson College, he has, since 1856, filled the Chair of Mathematics in the University. His contributions and discoveries in astronomical science have given him a world-wide reputation, and Procter has devoted a special article to his immense service to astronomy. More than thirty years ago he was styled "the Kepler of Modern Astronomy," and the epithet has been repeated by men like Procter.

The late Hermann B. B. Boisen was another illustrious member of the Faculty.

If the Faculty has been eminent, the success in life of the Alumni proves their ability as trainers of youthful thought to enable it to acquire and apply information. The University boasts of distinguished graduates in almost every State and every profession.

Down to as recent a date as the establishment of Cornell University (1869), the plan of allowing students freedom of choice in studies was unknown. At present, the elective system is adopted in some form by a large number of colleges, and at Harvard extends to the whole curriculum.

Those best versed in educational science are still undecided how far election should go. The University of Indiana adopts a medium. In the junior and senior years every student has one specialty and two electives. The two electives he makes term by term, so that in the course of the two years he can pursue every study. As a specialty the student chooses a department which he must follow for two years.

There are two things which specially mark the present administration of the University of Indiana. One of these is the spirit of investigation. Not simply in the strictly scientific departments, but in every department independent investigation is required.

The other spirit is the spirit of liberty. The Faculty refuses to regard itself as a police force. The catalogue is not a book of penal statutes. During the present year only a single case of discipline has arisen; that rather, a relic of past conditions.

De Pauw University.

At the junction of the Terre Haute and Indianapolis, the Indianapolis and St. Louis, and the Louisville, New Albany and Chicago Railways is Greencastle, elevated some 900 feet above the sea. It is the seat of De Pauw University, an institution which has within the past few years reached a degree of national prominence.

This institution was first known as the Indiana Asbury University. It sent out 900 graduates, many to occupy prominent positions in the Church and State.

It was the purpose of the founders of the institution, ministers of the Gospel, to lay the foundations of a university in reality as well as in name.

In 1846, a law department was organized, which continued until 1862. In 1848, the Indiana Central Medical College was attached to the University.

With these exceptions, the work of the Indiana Asbury University was confined to an undergraduate collegiate course. In 1881, the endowments and resources of the Indiana Asbury University failed almost completely, after the institution had maintained an active life for forty-four years.

At this juncture the Hon. Washington C. De Pauw, of New Albany, Ind., for several years a trustee of the University, and at that time president of the board, who had made a will providing for the establishment of a university within ten years after his death, resolved to effect the result in his lifetime by developing the institution with which he was already identified. On May 5th, 1884, the name was formally and legally changed. De Pauw University began its career on a broad foundation. Mr. De Pauw based his donations on the condition that the citizens of Greencastle and vicinity should raise $60,000, and that the citizens of the State at large should raise at least $120,000. He agreed, upon the fulfillment of these conditions, to pay $240,000 into the University treasury. The citizens of Greencastle and Putnam County promptly paid their portion. A large part of the general subscription throughout the State has also been paid, and Mr. De Pauw has much more than fulfilled the conditions which he assumed.

The Indiana Asbury University became the Asbury College of Liberal Arts, special and professional schools established on separate foundations as integral parts of the University. The institution expanded from a college with a dozen professors and instructors to a university with nine co-ordinate schools and more than forty teachers.

As at present organized the University includes: 1. The Asbury College of Liberal Arts, including four parallel courses—the classical; the philosophical, and the scientific courses; and the course in literature and art. 2. The School of Theology. 3. The School of Law. 4. The School of Military Science. 5. The School of Music. 6. The School of Fine Arts. 7. The School of Horticulture. 8. The Normal School. 9. The Preparatory School. 10. The School of Medicine (not yet organized).

The Faculty of the University is composed of a chancellor, a president, a vice-president, deans of schools, professors, assistant professors and instructors.

The Chancellor of the University is Bishop Thomas Bowman, D. D., LL. D. The President is Alexander Martin, D.D., LL.D.

The Asbury College of Liberal Arts is part of the University and is its chief school. There are four different lines of work leading to the degrees, respectively, of Bachelor of Arts, Philosophy, Science and Literature. These courses are all invariable, though different from each other, to the end of the sophomore year, after which time an election is permitted. It is assumed that students, by the time they have reached their junior year, have acquired sufficient experience and definiteness of purpose to make a selection with wisdom. Experience for several years has justified the University in its action.

The School of Theology, of which Alexander Martin, D.D., LL.D., is President, though a distinct branch of the University, yet in part works in connection with the College of Liberal Arts. During the junior and senior years in the College students can elect two entire studies in theology and graduate Bachelors of Arts. Thus the first year of a three-years course in theology may be accomplished before formally entering the school. On completing the course a student can graduate with a diploma of honor, or if he be a Bachelor from any good college, he will receive the degree of Bachelor of Sacred Theology. There are now about forty students in attendance. The curriculum of studies, which has been prepared with great care, is rich and varied, having in its latest issues special reference to the truths of the Christian religion, with the negations of atheism, agnosticism and annihilationism, as well as with the pantheistic, materialistic, rationalistic and positive philosophy of the day.

The School of Law, of which Alexander Martin, D.D., LL.D., is President, and Hon. Alexander C. Downey, LL.D., Dean, has been in existence two years. Its course of study is as extensive as that of the older law-schools of the country. There is a library of law-books for the use of the School. Students in the College of Liberal Arts, by taking the study of law during their junior and senior years, can graduate from this School to the Degree of Bachelor of Laws at the time of their graduation. A class in commercial law is formed each term.

The School of Military Science and Tactics is under the management of a commandant of cadets detailed by the War Department. The aim of this School is to give instruction in military science and tactics, and, by the observance of military discipline, to inculcate habits of attention, promptness and obedience.

The School of Music, of which James H. Howe is Dean, was organized in 1844 on the conservatory basis. Every succeeding term brings students who are determined to obtain a broad musical education, rather than proficiency on one instrument.

The School of Horticulture is in charge of Hon. William H. Ragan, Professor of Horticulture and Superintendent of Parks. It is the purpose of this School to give instruction in those branches of study most nearly related to horticulture, and in the practical application of the knowledge thus acquired. The course of study includes vegetable physiology, botany, animal life in its relations to horticulture, chemistry, meteorology, fruit-growing, vegetable-gardening, forestry, and landscape-gardening. Students completing the course will be entitled to a certificate of attainments. This School has charge of the volunteer weather service of Indiana and issues full monthly reports.

The Normal School, of which Samuel S. Parr is Principal and Professor of Didactics, was organized in 1885. This School is to be carried on by specialists.

The School of the Fine Arts has been in existence nearly two years. Professor H. A. Mills is Dean of the School.

Only a few years ago the study of art was supposed to be confined to a favored few whom nature had endowed with a special genius. But this view is rapidly passing away, and a general knowledge of subjects pertaining to art is now regarded necessary to every cultured person. The object of this School is the cultivation of the mind and heart as well as the hand, and the education of the appreciative power of the public through the healthful teaching of nature, and through the true, good and beautiful in and around our homes. A purpose short of this is unworthy a School of Art. The equipments of this School are complete for the training of the artist as well as for giving instruction to those who wish merely to become amateurs and intelligent appreciators.

The Preparatory School is the stepping-stone to the College of Liberal Arts.

The course of study covers three years, and is substantially the same for all the different courses in the College of Liberal Arts.

The campuses of De Pauw University are five in number. They are known respectively as West Park, with 4½ acres; Centre Park, with 8½ acres; East Park, with 4 acres; South Park, with 7½ acres, and University Park, with 119 acres. The chief buildings are six in number, viz., East College, West College, Music Hall, Ladies' Hall, Gentlemen's Hall and McKim Observatory.

The main building, known as East College, is located in Centre Park, being 126 feet long and 94 feet wide. It is a brick and stone building of four stories, with towers and mansard roof. The first story, or basement, contains eight rooms, 12 feet high, besides halls and furnace room. Here is located the Chemical Laboratory. The second story, 16 feet high, contains the halls of two of the literary societies, three recitation-rooms, the art-room, the registrar's office, besides halls and a reception room. The Biddle Mathematical Library is on this floor. The third floor is occupied mainly by the chapel, known as Meharry Hall, a room 54 by 90 feet, and 42 feet high.

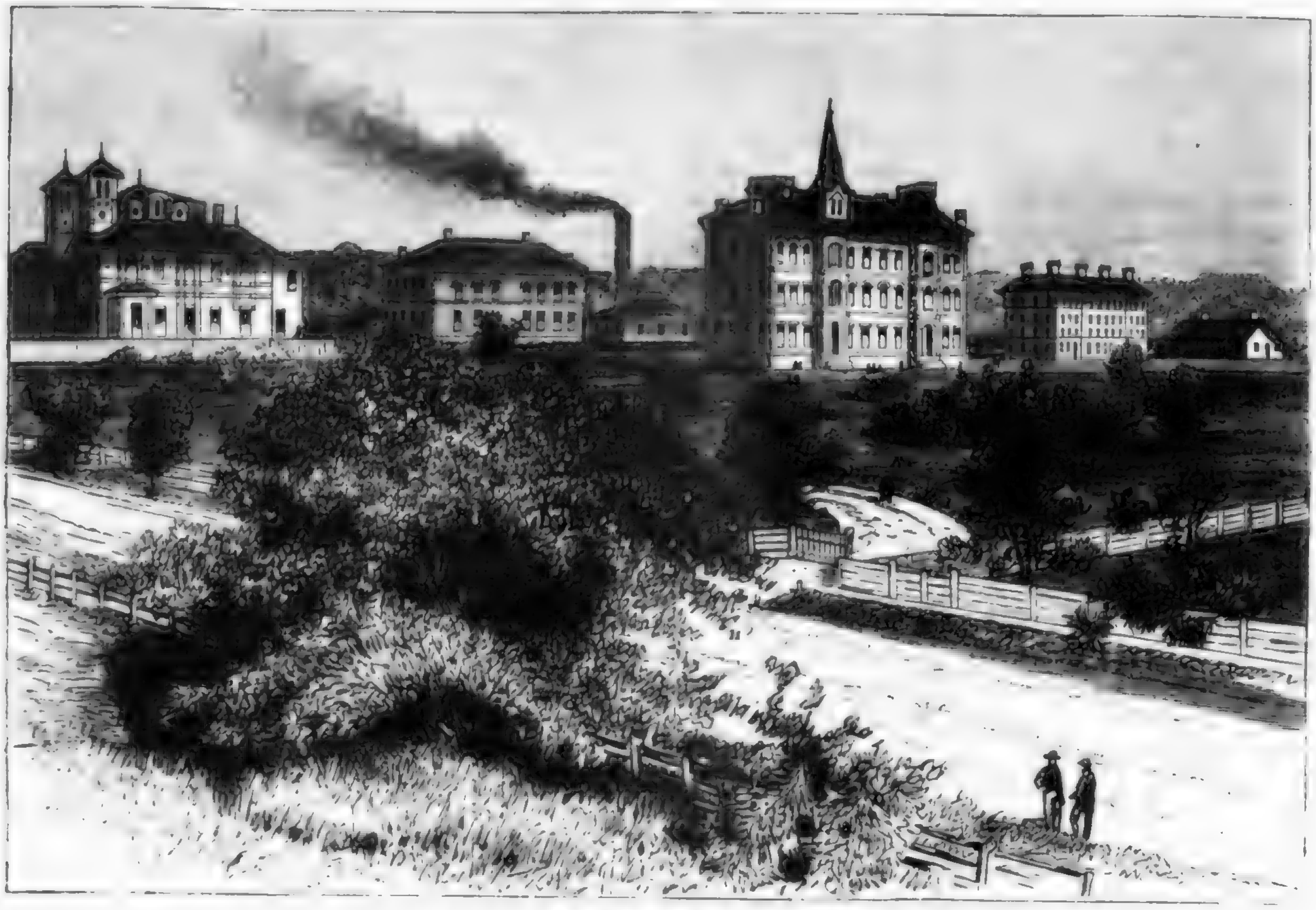
The West College, near the centre of the West Campus, is a three-story brick building, the main part of which is 54 by 99 feet. To this central building there are annexes east and west.

The Gentlemen's Hall is located on a corner of West Campus. It is a building of four stories besides the basement.

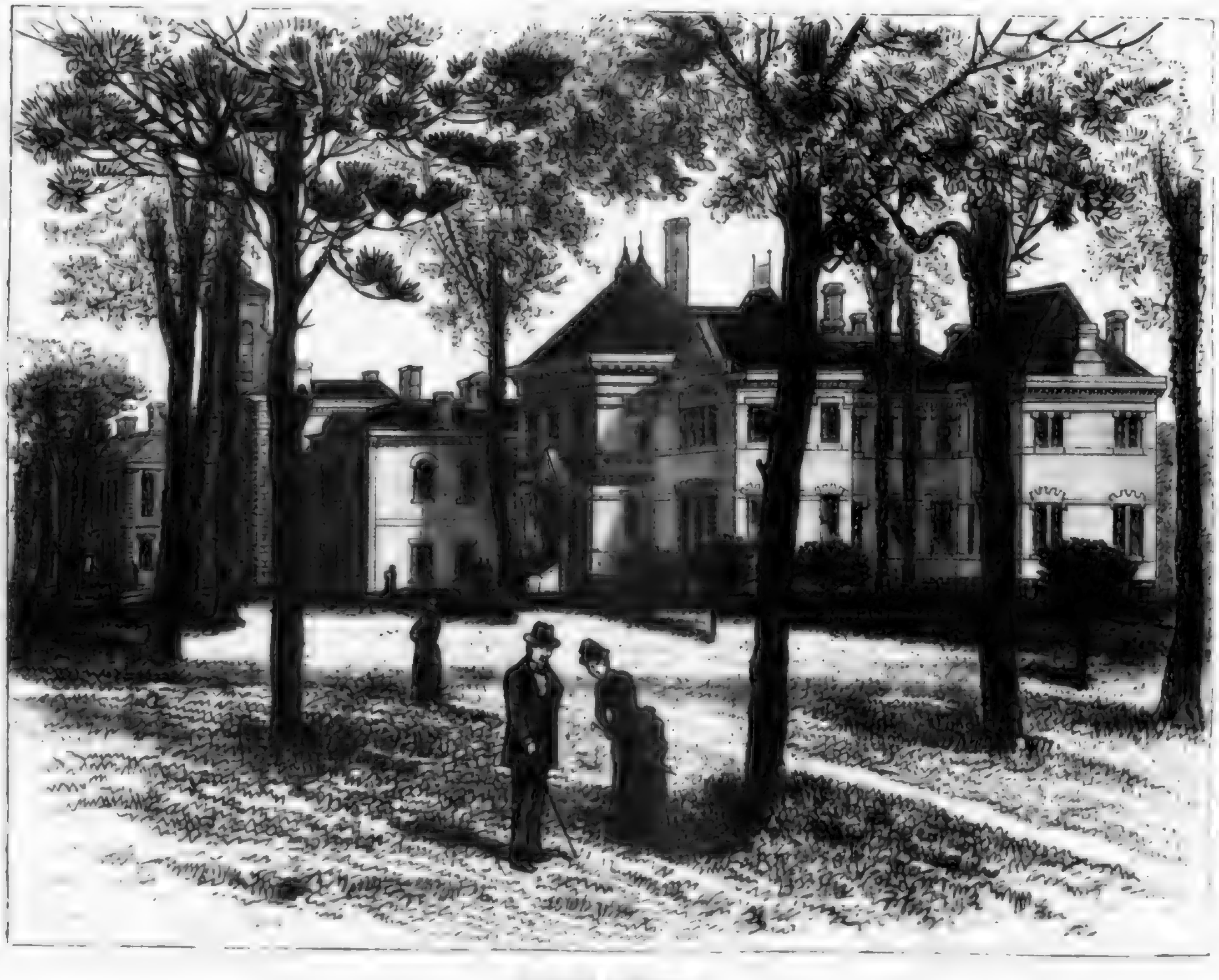
On the southwest corner of East Campus stands the Music Hall, a new three-story brick structure with stone trimmings.

In the middle of East Campus is Ladies' Hall, a three-story brick building with fifty rooms, and a dining-hall capable of accommodating 200 boarders, the whole presided over by Mrs. Belle A. Mansfield, A.M., Preceptress.

The McKim Observatory is situated at the eastern extremity of University Park, where it is free from the dust and jar of traffic. The Observatory is the gift of Robert McKim, Esq., of Madison. The building contains five rooms, viz., the library, the reception, transit, clock and equatorial rooms. The equatorial room is surmounted by an iron dome weighing two tons, which is moved by a direct pressure of twelve pounds. The chief instrument of the Observatory, the equatorial telescope, is in this room. It has an object-glass of 9½ inches clear



PURDUE UNIVERSITY.



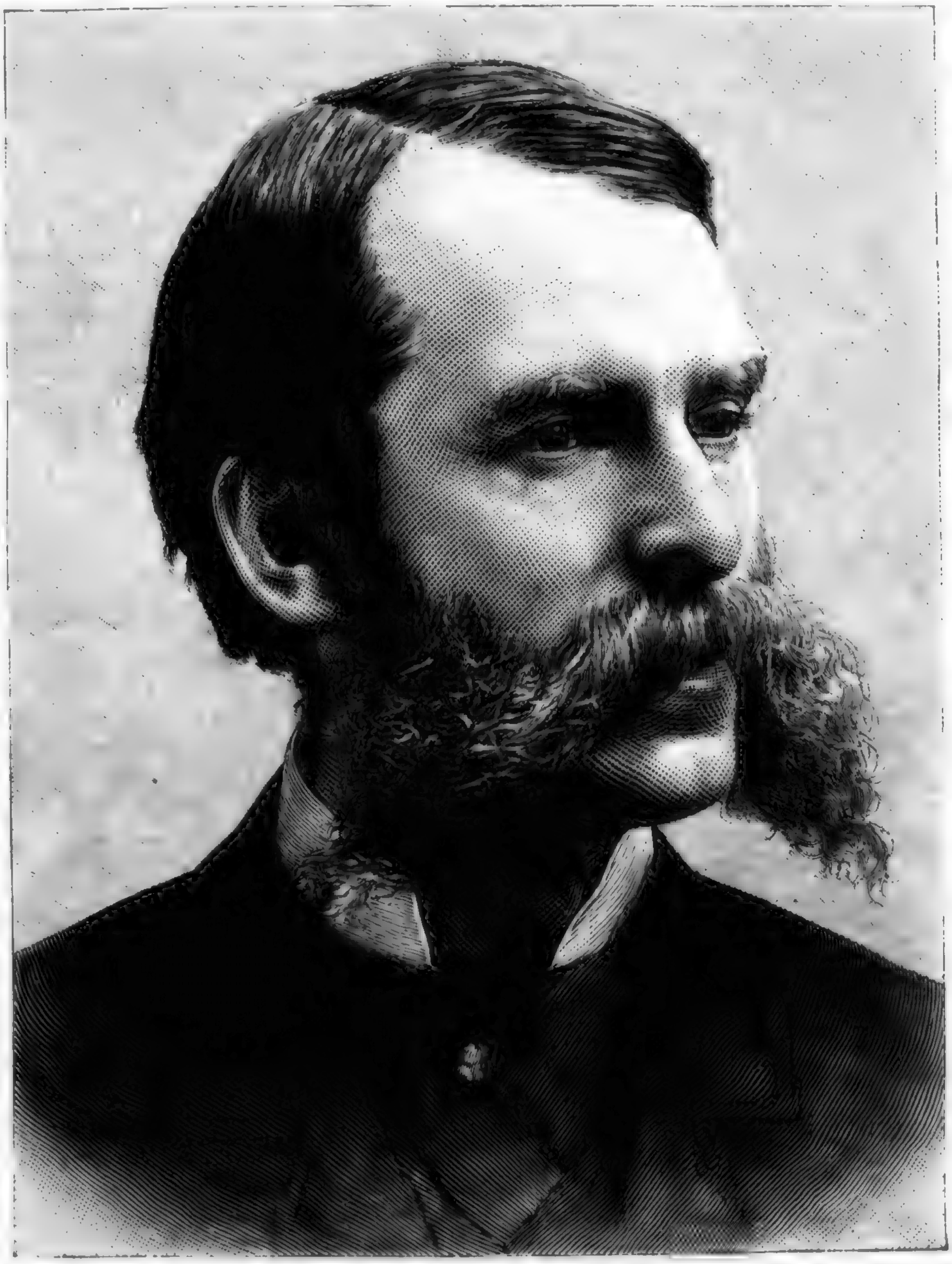
WABASH COLLEGE.

aperture, made by Alvan Clark & Sons, and is supplied with positive and negative eye-pieces, comet eye-piece and a micrometer. The tube is twelve feet long. The mounting of the telescope and the entire dome are the workmanship of Warner & Swasey, of Cleveland, O., who also made the electro-chronograph.

The libraries are as follows: The University Library in Newkirk Hall; the Libraries of the School of Theology and of the School of Law; the Biddle Mathematical Library; the Simison Latin Library; the House Greek Library; the McKim Observatory Library, and the libraries of the Literary Societies.

Tuition is free except in the Schools of Law, Music and Art, and in one or two special branches in the College of Liberal Arts. The price of board and lodging has been greatly reduced by the erection of the College Boarding-halls, so that any resolute young man or woman, however poor, can complete a course in De Pauw University.

This Institution, though under the control of the Methodist Episcopal Church, is in no sense sectarian. While its trustees are appointed by the four annual conferences of the Church in Indiana, and the members of the Faculty are elected by the trustees, yet both professors and students represent several of the leading religious denominations. The benefactor himself, Mr. De Pauw, is a gentleman of large and liberal views, and the Institution, though denominational, encourages its members in the freedom of their own religious preferences. The Young Men's and Young Women's Christian Associations have charge of the religious meetings, sustaining, besides other exercises, a noonday meeting through the College year.



JAMES H. SMART, PRESIDENT OF PURDUE UNIVERSITY.

PURDUE UNIVERSITY.

This University, the Indiana Institute of Technology, at Lafayette, was endowed by the General Government to the extent of $340,000, and, through the munificent donations received from John Purdue and other citizens of Tippecanoe County and from the State, $358,000 more have been expended in permanent improvements.

The University has been in operation about ten years, and has become one of the largest industrial schools in the country.

The total enrollment now exceeds 300, under a corps of instructors, which numbers twenty specialists.

The Institution is well fitted for its special work. There are six large college buildings, viz.: The University Hall, containing the chapel, two society halls, museums, library and recitation-rooms; a boys' dormitory, with accommodation for 90 students; a building used for a young ladies' dormitory, a dining-hall and the art department; a chemical and physical laboratory; Agricultural Hall, containing recitation rooms, an agricultural museum and the agricultural experiment laboratories; a Mechanics' Hall, including machine-shop, forge-shop, foundry, woodworking-shop, with commodious draughting and recitation rooms.

The campus and gardens contain 20 acres, and are beautifully laid out with walks and drives.

The purpose of the Institution is to afford technical instruction in those subjects that enter into the practical industries of life without neglecting to give a thorough course of the ordinary collegiate branches. It embraces a School of Agriculture and Horticulture, a School of Mechanics and Engineering, a School of Science, a School of Industrial Art, a School of Pharmacy, and a Preparatory Class.

The course of instruction in the first four schools is so arranged that they include, with few exceptions, literature, history, modern languages, mental philosophy, political economy, the higher mathematics, physics, chemistry, botany, zoölogy, physiology and geology. In addition to these branches common to the first four schools, the School of Agriculture adds four years of instruction and practice in agriculture and horticulture; the School of Mechanics and Engineering, two years in practical mechanics, and two of mechanical engineering; the School of Science, four years in laboratory work in the natural and physical sciences; and the School of Industrial Art, four years in industrial art; the School of Pharmacy affords instruction in chemistry, pharmacy, materia medica, botany, etc., with a large amount of laboratory practice for two years of five months each. The modern laboratory method is generally in use, and, wherever possible, the work in the text-book is supplemented by actual experience.

In the Biological Laboratory the student cuts animal and vegetable tissues with a microtome, mounts them and puts them under the microscope. In the shop he makes working drawings, turns at the lathe, hammers at the anvil, works in the foundry and turns out a stationary engine. Theory and practice go hand in hand.

A visitor to Purdue will find between 200 and 300 students in the recitation and lecture rooms during the forenoon, and hard at work in laboratories and shops in the afternoon; each student having an average of three recitations or lectures, and from two to four hours of laboratory practice.

A few steps from the main building is the Art Department. Here, generally, are 75 students intensely busy drawing the objects, or listening to instruction in outline, shade and color, the elements of linear perspective and orthographic projection, preparatory to architectural and machine-drawing. In a room in the basement, suitably arranged, will be found young ladies before neatly arranged benches, each provided with an outfit of fine tools for carving in wood. Here were being carved panels, brackets, screens, vases, easels, tables, chairs, doors, mantels, sideboards, and all kinds of furniture.

The Exhibition Room is filled with a large variety of finished work of the students.

In other rooms may be found students making clay models of architectural ornaments, such as keystones, cornices, string-courses, window and door caps, and casting them in plaster and terra-cotta, and designing original patterns for carpets, oilcloths, wall-papers, frescoes, and similar work.

A short walk brings us to a well-equipped Chemical Laboratory, affording accommodations for fifty students at one time. Some of the pharmacists are engaged in making fluid extracts and gelatine-coated pills, while others are examining the strength and purity of various commercial drugs. Here will be seen students in general chemistry making an analysis of building-stone, or testing for poisons, or ascertaining the purity of water, etc. The State Chemist work is done in this department. About fifty analyses of fertilizers were made by them during the present year.

Passing to the Physical Laboratory, about thirty sophomores will be seen standing at long benches engaged in practical physical manipulation.

In the Biological Laboratory similar work is carried on. All are required to make careful drawings and give accurate descriptions of what was discovered.

In the School of Agriculture and the experimental station, scientific investigations in laboratory and in field are carried on. Commercial fertilizers are analyzed in the laboratory and tested in the field. Here is a plat with fifty varieties of wheat, the purpose being to ascertain which variety is best adapted to the locality. The institution operates, through its graduates, several co-operative experimental agricultural stations in various parts of the State. In these sub-stations the behavior of small grains is ascertained under a variety of different climatic conditions, and in a variety of soils.

Through the co-operation of the State Horticultural Society it has recently established ten horticultural stations in various parts of the State, the purpose being to test new varieties of fruits that may be offered on the market.

This circuit of stations is managed by a professor of the University. One can visit a testing-laboratory in which a great number of seeds are tested in reference to their purity and vitality.

One of the most novel sights is the room devoted to economic entomology. Here the little creatures that are so injurious to our grains and fruits are bred and hatched and studied and destroyed by various insecticides. The studies include the character of soils, crop rotation, soil-exhaustion, drainage, stock-breeding, market-gardening, fruit-culture, etc.

Approaching the Mechanical Laboratory, we hear the hum of machinery and all the sounds of a busy workshop. Passing through the engine-room, we come to the wood-working room, where the students begin their shop training. Thirty or forty boys are hard at work at the different machines and work-benches, and seem thoroughly interested in their work.

We next go to the foundry, containing a cupola, a furnace for iron, a furnace for brass, etc.

Students take turns as chief manager, assistant, etc., of the foundry and have actual charge of all the work; such as weighing out the quantities of the various irons to make the proper mixture, regulating the air-blast, etc.

One of the students acts as melter, and, as he announces the melted iron as ready, two others bring up an iron ladle and hold it under the nozzle of the furnace. The melter then drives in an earthen plug and the bubbling and seething current of white-hot iron is caught in the ladle and then poured into the various molds. In addition to the other castings, there is always a piece of a certain size cast which is tested for strength, so that the judgment of the manager as to the proper mixture of pig-irons is subjected to the practical test.

We now enter the forge-shop, containing a dozen forges (built by the students themselves), all supplied with air-blast by power.

Every morning, during the first two years, an hour is devoted to the study of the theory of the various shop processes, and then, every afternoon, two hours are devoted to actual work in the shop, applying the principles learned. The boys consequently work intelligently and accomplish a perfectly wonderful amount. In addition, they get a thorough college education. Of course they have to work very hard, but they seem to enjoy their work. The last two years are specially devoted to the theory and practice of mechanical engineering. In addition to theoretical instruction in the class-room, the students do considerable practical work in the drawing-rooms and in the testing laboratory. In the former, they make working drawings of machinery and prepare original designs to suit specified conditions. In the testing-laboratory, the students acquire a practical knowledge of the strength of materials by actually testing a large number of specimens on the powerful testing-machine of the University. The testing-laboratory also does commercial experimental work of various kinds, such as determining the evaporative power of boilers, the relative economy of different coals, the efficiency of steam engines, etc. In all such work, the students assist, and they thus acquire a direct practical knowledge that is of great value. In charge of an instructor they also make visits to the furnaces and manufactories of neighboring cities to see in actual practice those processes with which they have already become familiar in the class-room. The aim throughout is to make the student do practical work so as to finally graduate, not idle theorists, but men who can do men's work and do it in a manly fashion.

Wabash College, Crawfordsville, Ind.

Whilst a member of Miami University in Ohio, the Rev. James Thomson determined to found a college in the Wabash Valley. In 1827 he reached Crawfordsville and began his ministry there. On the 21st of November, 1832, a convention was held at Crawfordsville to consider the plan of founding a college. Nine men, five being Presbyterian ministers, met at the pastor's residence. All the members of that convention were actually poor, and Mr. Thomson was far from being rich.

It was, however, resolved to be "expedient to attempt the establishment of a literary institution at Crawfordsville," and they elected a Board of Trustees. The Hon. Williamson Dunn, of Hanover, offered fifteen acres of land to the institution, with the privilege of purchasing sixty more.

Crawfordsville is in the midst of a fine country, the surface of which is beautiful with the undulations peculiar to what is known in geology as "the drift." It is underlaid with a deep stratum of gravel, and abounds in fountains and streams. The hill on which the College is built is about one hundred feet above the stream which flows by the town.

Within a year after the convention selected a site, a very unpretending building was erected. It was still unfinished when, on the 3d of December, 1833, Professor Caleb Mills, a graduate of Dartmouth College, opened the institution with twelve young men. It had a small farm, a small building, a small school and a debt.

In 1834 the Rev. Elihu W. Baldwin, a popular pastor in New York, accepted the presidency, and his friends at once contributed $24,000, and from New England there came several thousand dollars more. With such a sum of money it was thought desirable to erect a new and more commodious building on the more favorable spot it now occupies. The new building was but just occupied when it was destroyed by fire. Nearly all the results of those six hard years had vanished in a night. It is related by a distinguished jurist, who, as a student, was present, that so piercing and distressing was the cry of Professor Mills as he opened his door and saw the fire, that that cry left a more positive impression on his mind than the fire itself.

The news of the disaster led Dr. Baldwin, then at the East, to make a fresh appeal to those who had already been so generous. Nor was the appeal vain. But, notwithstanding this help, the College was compelled to make a loan of several thousand dollars of the State's "sinking fund" at a high rate of interest.

Among the interesting crises of its history, was that which occurred in 1843. It was a period of great financial distress, and several colleges were threatened with ruin. At that time the "Western College Society" was organized, which rescued five imperiled institutions, of which Wabash College was one.

Of the large sums which have done so much for the College, by far the largest part came from citizens of Indiana. Forty-eight thousand dollars came from a citizen of New Jersey, and at least $250,000 came from gentlemen residing in New Albany, Terre Haute, Lafayette and Indianapolis.

And now, what has the College to show for what its friends have done for it since that memorable convention?

Its largest and best benefits are found in the men it has trained. Several thousand students have been taught in its class-rooms. Nearly six hundred young men have completed its course of study, and are now to be found in the learned professions and honorable callings of life. Not a few of its "ungraduated Alumni" have also become eminent.

If, now, we turn to the material means which have been collected here for the education of young men, the display is imposing. Though little has been expended for mere show, the buildings are comfortable, and, standing in the midst of the fine grounds, they present a noble appearance. The accommodations for class-work in every department are admirable.

The libraries, to which the students have access, are the College Library, and the libraries of the two literary societies, containing in the aggregate more than twenty-five thousand volumes. The College Library, containing over 22,000 volumes, is in a beautiful room in the north wing of Centre Hall.

The Rev. Joseph F. Tuttle, D.D., the President of the College, has had special charge of the Department of Philosophy, giving instruction in mental and moral science, logic and political economy, and in the Christian evidences.

The professors of the Greek and Latin languages have given extended and careful instruction in ancient history. And the Rev. John De Witt, D. D., of Lane Seminary, the present year has delivered a course of admirable lectures to the senior classes on the "Post-classical History of Europe."

The departments of Greek and Latin are in no respect inferior to the classical courses in other colleges. The course of study is arranged in each for four years.

To the study of English literature is given special prominence. German also, and French, form part of the course.

The mathematical course includes the pure mathematics, and the practical application to surveying and engineering.

Peck Scientific Hall is the memorial building to a generous patron of the College whose name it bears. The endowments of the departments of physics and chemistry and the building were given by the late Edwin J. Peck, of Indianapolis.

The building is specially designed for the departments of physics and chemistry, and contains two large lecture-rooms, two general laboratories, six rooms for apparatus and supplies, two professors' rooms—one room for the special use of the Board of Trustees, and five large basement rooms for assaying, manufacture of the gases, storage, etc.

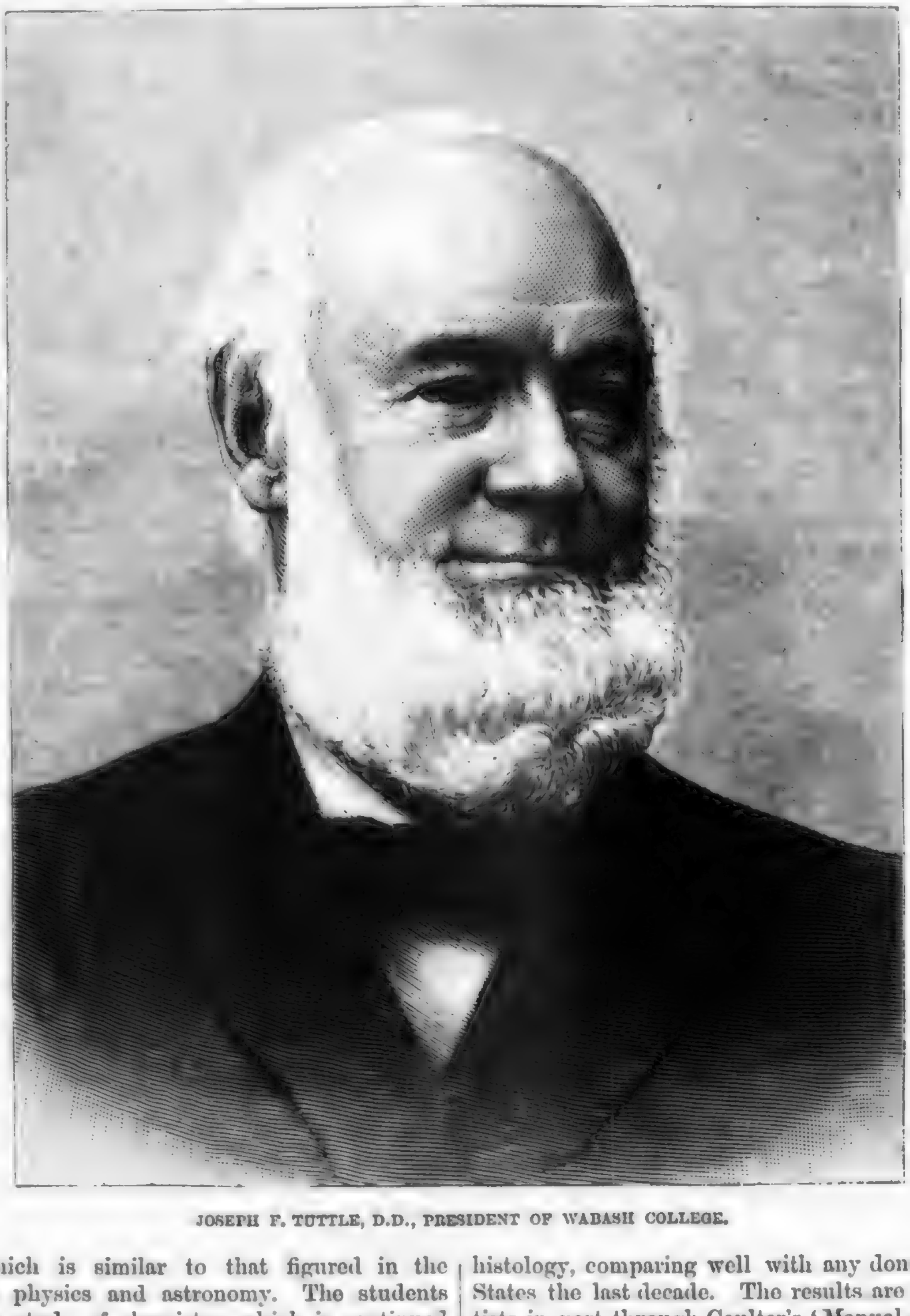
Particular attention has been given to arrangements for furnaces, gas and water pipes, motive-power and light, in order to furnish the best facilities for experimental illustration and research.

The course of instruction in physics and astronomy embraces, first, the discussion of the general principles of mechanics; second, the study of astronomy; third, elective studies and laboratory practice in the senior year, including analytical mechanics and strength of material, dynamo-electricity and electrical measurements, and original research with the microscope and spectroscope. Particular attention is given to the discussion of the latest discoveries and inventions in the rapidly widening fields of practical physics.

Special students in astronomy, mechanics, microscopy, spectrum analysis, dynamo-electricity or other kindred branches of physics, may have the opportunity to pursue their investigations here with great advantage.

The first floor of Peck Hall is entirely devoted to the department of chemistry, and contains eight rooms, including a large lecture-room, a large laboratory-room for work in qualitative analysis, and a room specially devoted to blowpipe work, besides room for delicate scales and balances and for quantitative work. Lecture experiments are given before the class in the general lecture-room, which is similar to that figured in the department of physics and astronomy. The students here begin the study of chemistry, which is continued afterward in the other rooms by individual work in the various laboratories.

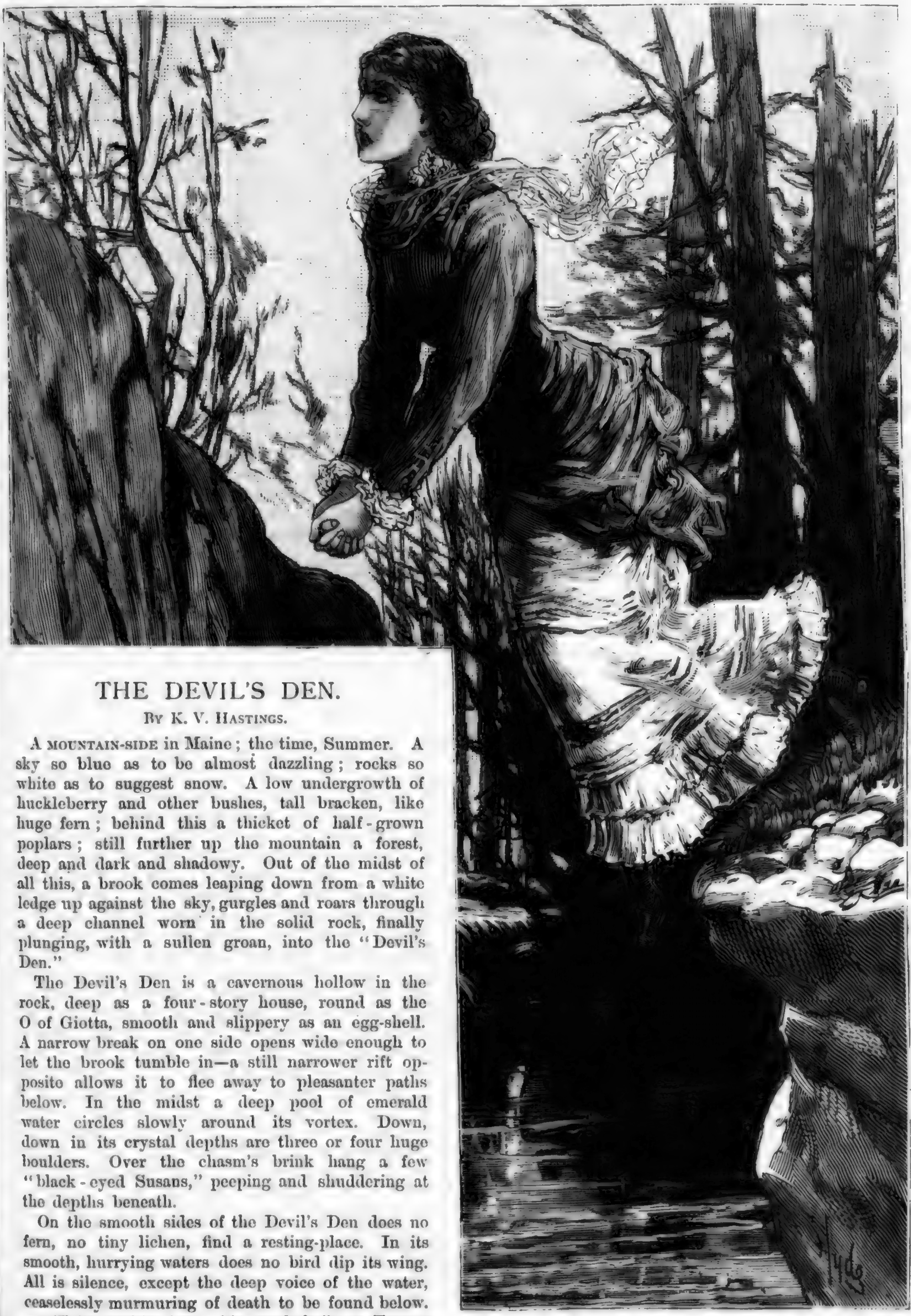
The Hovey Museum is devoted to the laboratories and collections in the department of biology. The main room, occupying nearly all of the lower floor, contains complete series of fossils to illustrate the study of paleontology, the local beds being especially well represented by the famous crinoids of this vicinity. An upper room is occupied by an archæological collection representing chiefly the riches of Indiana in this department, while another contains the large herbarium and working library of Professor Coulter, under whose curatorship the whole building is placed. Three laboratories complete this quite extensive equipment for biological study. There is a large general laboratory for elementary work in botany, while a special laboratory for advanced students gives the seclusion and more elaborate apparatus required for their work. The third laboratory is devoted to zoölogical dissections, and has strong light and water supply. As the courses permit two, or even three years work in these laboratories, much good work has been done, and the original papers issued from this source are taking rank among the best.


JOSEPH F. TUTTLE, D.D., PRESIDENT OF WABASH COLLEGE.

A recent editorial in a leading Indiana journal declares that "Cornell University, with its great resources in original work in botany, is behind Wabash College. In the new Biological building of Wabash College, opened last year, has been done by Professor Coulter and his students very fine work in systematic botany and vegetable histology, comparing well with any done in the United States the last decade. The results are known to scientists in part through Coulter's 'Manual of Botany of the Western States,' and also his 'Manual of Laboratory Processes,' which has been approved by the leading laboratory teachers of the country."

The *Botanical Gazette*, edited and published from Wabash College, is the leading botanical journal of the United States, and has a large circulation in Europe.

The Preparatory Department is the most important source whence the College derives the students for its college classes.



"THEN SHE STEPS TO THE EDGE, AND MURMURS : 'OH, HEAVEN FORGIVE ME, AND BLESS JACK WHEN I AM GONE!'

THE DEVIL'S DEN.

By K. V. Hastings.

A mountain-side in Maine; the time, Summer. A sky so blue as to be almost dazzling; rocks so white as to suggest snow. A low undergrowth of huckleberry and other bushes, tall bracken, like huge fern; behind this a thicket of half-grown poplars; still further up the mountain a forest, deep and dark and shadowy. Out of the midst of all this, a brook comes leaping down from a white ledge up against the sky, gurgles and roars through a deep channel worn in the solid rock, finally plunging, with a sullen groan, into the "Devil's Den."

The Devil's Den is a cavernous hollow in the rock, deep as a four-story house, round as the O of Giotta, smooth and slippery as an egg-shell. A narrow break on one side opens wide enough to let the brook tumble in—a still narrower rift opposite allows it to flee away to pleasanter paths below. In the midst a deep pool of emerald water circles slowly around its vortex. Down, down in its crystal depths are three or four huge boulders. Over the chasm's brink hang a few "black-eyed Susans," peeping and shuddering at the depths beneath.

On the smooth sides of the Devil's Den does no fern, no tiny lichen, find a resting-place. In its smooth, hurrying waters does no bird dip its wing. All is silence, except the deep voice of the water, ceaselessly murmuring of death to be found below.

"'Taint nothin' but a big pot-hole," says Farmer Thompson, when his boarders go and sketch it, write verses upon it, and choose its neighborhood as their picnic ground.

This very day it has been the scene of a picnic; but lunch having been dispatched, the company is now scattered hither and thither, botanizing, sketching, or exploring, as the case may be. Some find "picturesque bits" in the glen down-stream, and out with pencil and sketch-book, to "fix" them. Some tumble into clumps of prickly pears, and stop to classify them ere extricating themselves from such thorny embrace. Some clamber up the brook, and rest themselves in the shadow of forest-trees.

Just above where the brook leaps out of the sky, and so near that it overlooks the Devil's Den, is a clump of pines among the poplars. It is fragrant with ferns, rank with moss, and sweet with all woody odors. Little rifts are to be seen in the green roof overhead, through which tiny threads of sunshine find their way.

The stream is broad and peaceful, gently sliding from one level to another of its terraced bottom. No sound is heard except the hum of insects, and the brook's hollow moan, as it leaps into the den below.

Into this stillness breaks the tramp of human footsteps, the music of human voices, and down the bed of the brook come two figures—a man and a woman.

He is tall, broad-shouldered and thirty; she, slender, graceful and five years younger. A dark-blue flannel suit sets off her blonde beauty to advantage, and proclaims her to be, like her escort, a Summer idler.

Hers is a face fresh and sweet as the morning when it first dawns, but just now clouded and troubled.

"Oh, Jack," she says, leaning heavily on the arm outstretched to support her, "I'm so tired! I'm glad we don't have to go any further."

And she stands still on a boulder in mid stream.

Jack, who is high-booted and flannel-shirted, flings his cane on the bank, and quietly steps off into the water; then, despite the girl's murmured remonstrance, he takes her yielding form in his arms, and carries her to the shore, there laying her down in a deep bed of moss.

"Rest there a while," says he. "I'll sit by this tree, and we'll wait here till the others come back."

"They're so far behind," says the girl.

"Yes; but I don't think they'll be long. Fletcher and my wife are good walkers, and they, at any rate, will catch up with us soon. Don't be frightened, little one; you're all safe," he adds, with a certain bitter sadness, as the girl turns away her head, now softly pillowed in ferny moss.

She turns back instantly, flashing her deep-blue eyes at him, with a look of tender entreaty. Then she throws out an impulsive little hand, which is instantly caught and pressed in the larger.

"Frightened, Jack? How *can* I be frightened when you are with me? I always feel safe and satisfied when you are near."

The young man takes the caressing hand and presses it softly to his lips. Then he draws a little nearer, and puts one arm across the girl, resting on his hand at her other side.

"Just this much and no more," he pleads, as she begins a remonstrance. "I can't talk to you when I'm so far away; and what harm will it do?" he urges, seeing she still resists. "Don't push me away, Fannie—it breaks my heart."

The girl looks into his eyes, and her hand falls. They are very handsome eyes—soft with tenderness, or dark with passion, as the case may be, but at all times clear and honest. Fannie Hamilton drops her head.

"I can't refuse you, Jack," she sighs; "but I know it's wrong. Oh, Jack!" with a sudden outburst, "how hard that it should be my duty to oppose you in anything! And I can't! The task is too hard for me. I'm wax in your hands, and you know it! You oughtn't to have kissed my hands just now; your arm shouldn't be where it is, and I oughtn't to sit still and let you, and, oh, dear! we shouldn't be here at all!"

And the poor girl writhes on her mossy bed.

Maskelyn looks at her attentively for a minute, then answers, slowly:

"Why shouldn't we, my darling? It's a great comfort to me, and can do you no harm."

"Oh, it isn't the harm it could do me!" cried the girl, in distress. "If that were all, what would I care? But it's all *wrong*, and it's so mean to Agnes."

"How is it mean to Agnes? I love her just as much as ever."

"Yes, I know; *you* are not mean to her—you never could be; but *I* am! She is my friend; she trusts me as though I were her sister. And all the time I'm loving her husband, and letting him love me! Oh, it's dreadful! I can't endure it!"

And the girl covers her face in despair.

Maskelyn thinks for a minute intently, his strong face working, and his color changing from pale to red. Then, with an effort, he brings his countenance under control, and applies himself to soothing his companion.

"Fannie," he says, "Fannie, my darling"—she draws away her half-unwilling hands—"don't cry, my love. If you do, I shall certainly have to kiss away your tears. There!" as she smiles—"I knew that would stop you! Now we can talk!"

Just here a squirrel chirps in a tree hard by, and takes to flight, skipping from bough to bough. A sombre wood-moth rises and sails gloomily away, while a little brown lizard skurries off at the approach of an intruder.

A woman sauntering slowly through the wood, stepping noiselessly on the moss carpet, looking at flowers and ferns with happy, dreamy eyes, comes suddenly upon the pair. She sees all, but they see nothing, and while she pauses, struck by their attitude, that is said which roots her to the spot.

"I love Agnes as much as ever," says the man's voice. "She is a noble woman, and I shall love her to the day of my death. I would kill the man who spoke a word against her—I would hate the woman who was her enemy. But our marriage was a mistake; my own doing entirely, yet a mistake. She told me at the time that there was too much difference in our ages, but she couldn't deny that she loved me, and so I over-persuaded her. She was right, Fannie, and I was wrong—ten years is too great a difference, if it be on the wife's side. But all this is not her fault—no one but myself is to blame."

The woman behind the tree sinks to her knees, and buries her face in the rough bark. Her hands she clasps and flings high above her head with a gesture of terrible despair.

Her hat falls to the ground, and her beautiful hair, slightly streaked with gray, rolls down and lies in a heavy coil at the back of her neck.

In her soft eyes the great tears form and well silently over, falling on the upturned faces of a clump of little anemones, looking up in speechless sympathy.

"It is true, she thinks—all true. She is far too old to be Jack's wife; but, oh! she loves him so!"

"But you," Jack Maskelyn is saying—"oh, how I love you! I want you every minute, and more than I can say. Oh, Fannie, Fannie, my darling!" he cries, suddenly overcome by passionate emotion, "don't blame me. Pity me, that I must love you so much, and yet must lose you; must see you always within reach of my hand, yet must never claim you as my own; must see the kisses nestling on your lips, yet never touch them with mine; must behold your darling head before me day after day, yet never be able to pillow it on my breast, its natural shelter and abiding-place!"

And Jack Maskelyn, shaken as a reed before the wind, turns away his white, quivering face.

Fannie puts out a little soothing hand, and gently touches his hair.

"I *do* pity you, Jack, darling, and"—with a little quiver in her voice—"I pity myself. But we must do the right thing, even if it *is* hard—mustn't we?"

Jack nods.

"And I think that right thing is for me to go away."

Jack starts and looks up.

"Yes," continues the girl. "I cannot stay here without being a traitor to Agnes, and that I mustn't be any longer. Oh, my love!"—as he makes a strong gesture of dissent—"don't do a thing to prevent me. Just think what a woman Agnes is—how she loves and trusts me, and how wicked I am to betray her trust! Oh, let me go without a word!" And she clasps her hands in fervent entreaty.

She is sitting up now, with her back against a rock, and has withdrawn herself from his detaining arm. As she throws herself still further away from him, a flutter of garments behind a tree catches her eye, and she becomes aware that they are no longer alone.

"Jack," she whispers, and points silently.

Maskelyn leaps to his feet, and strides over toward the intruder, a deep, angry flush dyeing his cheek. But as he steps round the tree, and catches sight of the despairing figure crouched behind it, a great sorrow and perplexity rushes into his eyes. He falters for an instant, but only an instant.

"Agnes!" he cried. "Agnes!" and stooping, he gently lifts the weeping woman, holding her close to his breast, while he smooths the hair out of her eyes. "Don't cry so, Agnes," he pleads.

Mrs. Maskelyn chokes her piteous sobs, and tries to hold herself erect.

"You know I've heard you, Jack," she falters.

Jack nods.

"Yes; I'm sorry; I didn't mean you should."

"No, I suppose not."

"At least, not in this cruel way. I would have spared you if I could."

"Yes, I know. Not in this cruel way," his wife mechanically repeats after him.

Then with a weary sigh, she drops her head on his shoulder and for a few minutes all is still. Maskelyn looks down into the face upon his breast, and sees that it is torn and furrowed by this great agony just now come upon her. And as she lies there, with closed eyes, two cold, miserable tears stealing down her face, he is overwhelmed by a terrible rush of remorse. The years they have spent together—the happy years in which she has loved him so devotedly—rise up and reproach him. Years in which there has been no fault on her side, nothing between them except the wretched fact that while he was still developing into perfect manhood, she was beginning to go down the vale of years. But, oh! he loved Fannie so! And his hungry eyes wander over toward the fair young girl, out of whose blue orbs he sees his twin soul looking.

She has risen and stands before them, in her face a reflex of the terrible repentance she sees in Jack's.

"Agnes," she says, steadily, "don't blame your husband—blame me. I should have gone away long ago. I'm going now; I'm going to my uncle in Colorado. You and Jack will never see me again. Don't think me a hypocrite, Agnes. I loved you, and I love you still. May God bless you," she falters, as she turns from them—"you and—Jack." And she slowly walks away upstream.

The older woman never looks at her, scarcely seeming to hear.

When she is finally gone, and husband and wife are once more alone together, Agnes stands erect and looks deep into her husband's eyes.

"Jack," she asks, "have I been a good wife to you?"

"You have been the best wife in the world."

"Have I loved you too little, or served you too carelessly? Have I done anything I ought not to have done, or neglected such things as ought to have been my care?"

"God knows, Agnes," cries the man, with sudden passion, "all this is not your fault! If any one is to blame, it is I, for not being contented with one of the sweetest women that ever drew the breath of life. And I *was* satisfied. I was deeply and truly happy with you, and never dreamed of loving another woman. But suddenly I found myself overwhelmed with love for Fannie, and in one wild moment I told her of it, and forced her to acknowledge she cared for me. That was one week ago, and—that's all, Agnes. It's terrible enough, but it's all." There was a pause, during which the gloomy woodmoth sails back again and takes up his position on the crest of a tall fireweed.

A woodpigeon who has lost his mate goes cooing through the wood. Then all is still, except for the water plunging, with a sorrowful wail, over into the Devil's Den.

Jack Maskelyn covers his face with his hands and groans.

If only Agnes would reproach him, if she would get angry, if she would do *anything* rather than gaze at him with those sorrowful eyes!

Presently she speaks in a smothered tone:

"And do you love her so much, Jack?"

"I do, God help me!" he groans, in despair. "I have not forgotten to love you, my wife, but I *do* love her."

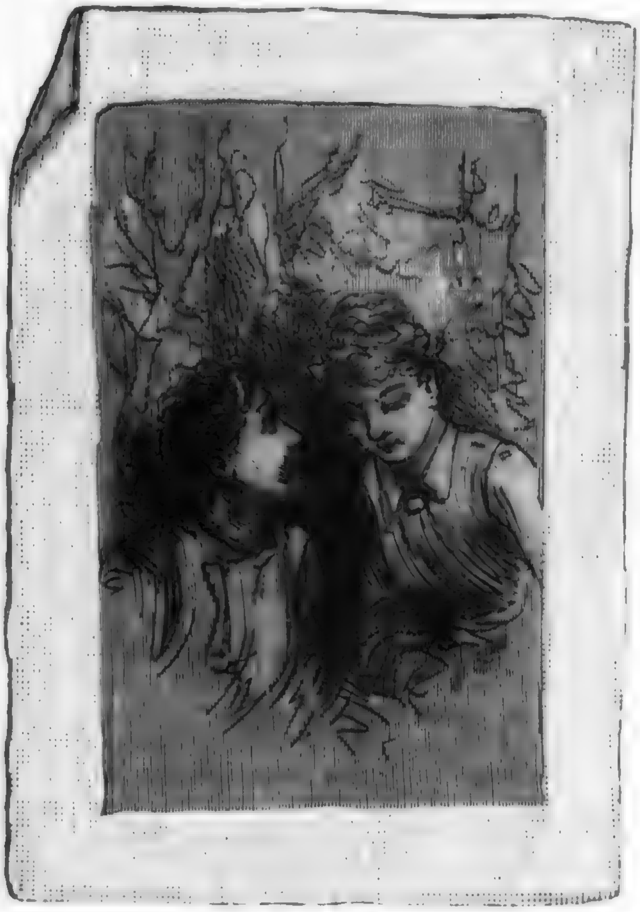
Agnes looks at him with almost a motherly pity.

"I'm sorry," she says, simply.

Again there is a pause, while the west wind stirs the poplars into an awe-stricken whisper, and the pines sigh for the human tragedy now enacting at their feet.

The man still covers his face with his hands, and leans against one of those same murmuring pines. At length Agnes breaks the silence.

"Well, Jack," she says, "I'm sorry—very sorry. But"—tears choking her voice—"don't let us make it any worse than it is. It's nearly time to go home now, and the other people will soon be here. We can't talk of this now—to-night, perhaps, or to-morrow. Please find Fannie, and bring her back—we brought her here, and must see her back in safety. I'll wait here for you—you'll find me here when you want me. Oh, Jack!"—with a sudden overwhelming burst of tenderness—"I've loved you so! Take me in your arms, Jack, and kiss me once more as you used to! Don't blame yourself for all this. I should have known better than to have married a young man like you. Oh, my beautiful darling!"—smiling through her tears—"what has an old, gray-haired



IN THE TOILS.

woman like me to do with the like of you?" Then, as her husband snatches her to his breast, and tries to stop her mouth with kisses, "Remember, my darling, I do not blame you. It was I who did you a wrong in marrying you. I was the oldest and should have known better. But, never mind, my love, kiss me now—once more—and yet once more. Good-by." And she melts away out of his arms, as does a handful of sea-foam from the grasp that fain would hold it.

When he is out of sight, Agnes Maskelyn knots up the hair that has fallen on her shoulders, washes her face clear of tear-stains, and sets in order that gay mountain dress which is to be her winding-sheet. Then she gathers a little bunch of white anemones and fastens them at her throat, just below the cheek where Jack kissed her last. She calls to the birds as they flit by her; once she stops and kisses the lips of a tall scarlet lily—once she stretches up her arms to the sun which is lighting her to the grave. And thus she comes to the brink of the Devil's Den.

She has only one thought—that Jack must be free. There is only one way to bring this about, and this one way she is about to take as unhesitatingly as she had always sacrificed herself in every manner to secure her darling's happiness.

She must be quick, for Jack will soon seek her there, and all must be over before he arrives. Of Fannie she scarcely thinks at all. Jack must be free to wed as he will—what matter with whom?

She has the Devil's Den all to herself. The artists are still far down the brook, the explorers far up it. There is no living thing in sight except patient Dobbin, hitched to the buckboard on which she and Jack have ridden hither this morning.

She goes to the edge and looks into the waters below. Yes, the current is deep and cold and strong—a resistless whirlpool—sending not up again that which has once come within its grasp. Down in its emerald depths there is rest, oblivion.

But of all this she thinks nothing; she loves life and would cling to it. But then she loves Jack so much better, and for his sake she is casting it away.

But his days must not be darkened by knowing what she has done; so she tramples the earth at the edge, loosening some of it and casting it into the deep below. Then she tears up the ferns and bushes hard by, and holds them in her hand. He will think she slipped and fell, that the treacherous shrubs gave way, and that there was naught to hold her back from eternity.

Once more she looks up to the soft blue sky; once more her eyes rest on the fresh green woods.

She looks at all, and bids all a silent farewell; then, feeling a great hunger for one more token of love from some living thing, she goes and throws her arms around old Dobbin's neck, kissing the faded white star upon his forehead, and feeling passionately grateful when he rubs his dumb lips to hers.

So all is done, her last leave taken, and there is no more to be said.

Then she steps to the edge; and one late scruple coming into her mind, she murmurs, but without one shadow of repentance:

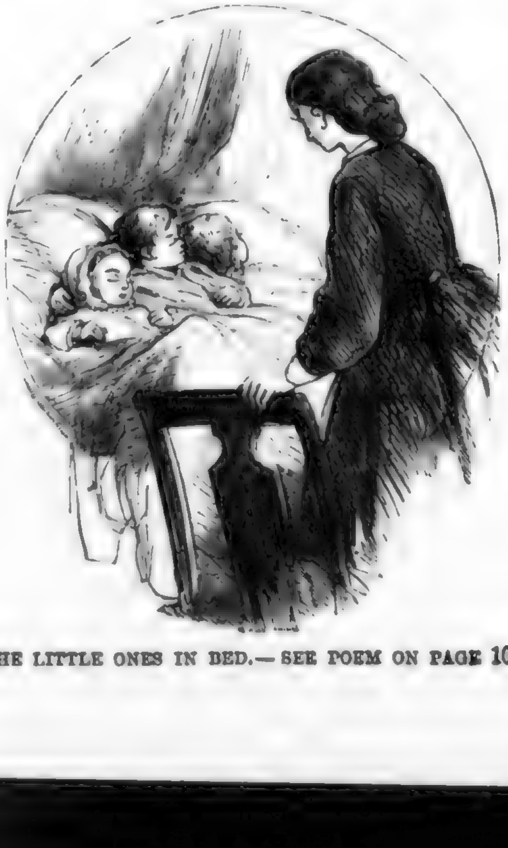
"Oh, Heaven, forgive me, and bless Jack when I am gone!"

A quick step from the brink, and all is over!

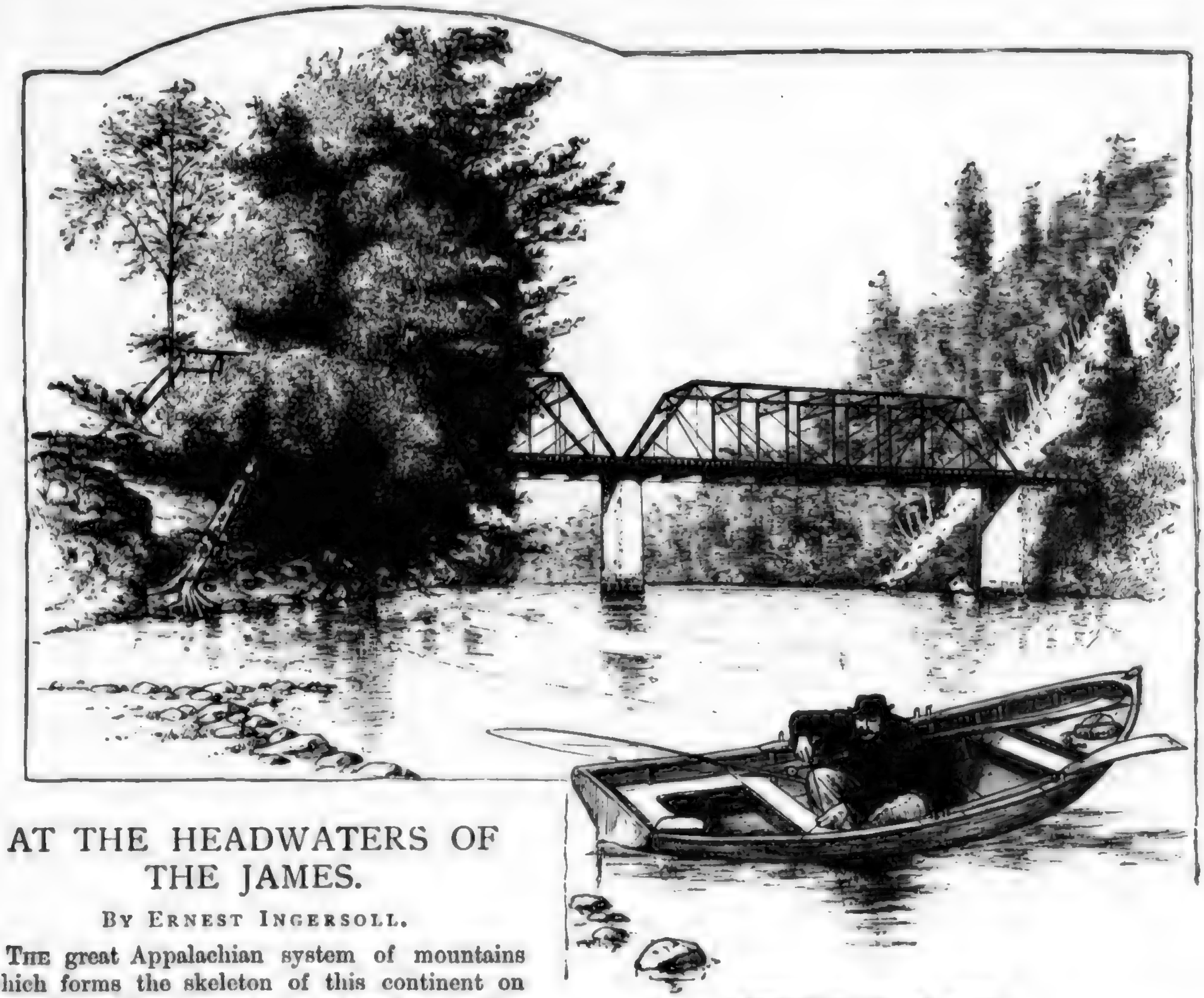
And her husband, coming in search of her half an hour later, finds but the broken bushes, the up-torn earth, and circling slowly round and round on the surface of that awful pool—only a woman's hand!

Much as we treat the world will the world treat us. A kind, sympathetic heart in your own bosom will surely call out goodness and friendship from others. It is a mistake to expect to receive welcome, hospitality, words of cheer and help over rugged and difficult passes of life, in return for cold selfishness, which cares for nothing in the world but self. Cultivate consideration for the feelings of other people, if you would never have your own injured.

Concentration is the secret of strength in politics, in war, in trade; in short, in all management of human affairs.



THE LITTLE ONES IN BED.—SEE POEM ON PAGE 106.



CROSSING OF JACKSON RIVER.

AT THE HEADWATERS OF THE JAMES.

By Ernest Ingersoll.

The great Appalachian system of mountains which forms the skeleton of this continent on its eastern border is made up of two parts: the Blue Ridge, its easternmost granite-cored bulwark, and the Alleghanies, separated from the Blue Ridge by a continuous and often broad valley, and made up of a great number of more or less parallel ridges of stratified rocks. This mountain system, reaching from Labrador to Alabama, is broadest in Pennsylvania, most lofty in Western North Carolina, and most interesting, as a whole, in Central Virginia, whither the present article is intended to carry the reader. In that part, the easternmost range of the mountainous country filling the whole space between the great Valley of Virginia and the Ohio River, is the highest, both in its peaks and as a whole; and there is a general lessening of heights westward to the level of the Ohio Valley. The watershed of the system, however, is not this easternmost and loftiest range (the North Mountain), but a chain of continuous ridges extending in a sinuous line throughout the whole length of the system, and distinguished by the name Alleghany, which properly applies to this divide alone, though frequently made to include the whole system. The Alleghany range runs from twenty-five to forty miles in the rear, or westward of, the North Mountain.

In a group of marshy springs oozing from mossy ledges on the eastern flank of this great watershed, in Highland County, rise the two greatest rivers of the Old Dominion, and two that have played most important parts in our national history — the Potomac and the James. Yet neither is known by its final names at first. In the case of the former it is the "South Branch" or Chorongobuton; in the case of the latter, the Jackson River.

The first white men who penetrated thus far did so by following up the Potomac waters to their head, and crossing the trifling ridge, on the further slope of which the drainage turned southward by a congeries of creeks to Dinwiddie's Gap, where they came together into a strong stream. Among the earliest and boldest of these frontiersmen—the buckskin-clad, uncivilized, but brave and hardy farmer-hunters, whose descendants still abound and sustain their character in the mountains—was a man called Jackson. He must have been a leader among them, for his name is attached to many features of the scenery, most prominently by this river, formed by the confluences of rivulets at Dinwiddie's Gap.

Jackson River flows southwestward, straight along the valley between the Alleghany and Warm Spring Mountains—the latter, in those days, passing under the name of Jackson's, or the Jackson River Mountain. But between it and the Alleghany rose a spur-line of hills, from behind whose parapet came Back Creek to swell its flood.

The region where these rivers take their rise is an extraordinarily rough and elevated one. All the well-defined ridges and mountains between the Alleghany and the North Mountain disappear in a confused jumble of shapeless elevations, hidden under dense forests and gashed by deep river gorges. The small areas of farming land accessible in the bottoms are very rich, and settlers early penetrated thither, despite the roughness of the country. This was just at the time of the French-Indian wars which harassed our frontiers previous to the conquest of Canada. Massacres and burnings devastated the whole line of outposts in Virginia and Pennsylvania. Forts were built here and there, and one of these was at

XUM

Dinwiddie's Gap, where Washington visited it when he was commander of the forces on the frontier, subsequent to Braddock's defeat. On Back Creek a fierce skirmish was once fought.

As soon as the Indians were driven back, settlers poured in and scattered throughout the mountains, advancing so much that Covington and Lewisburg, on the western slope of the Alleghany, became the central camps, when, during the Revolutionary period, the Indians were again in arms against the whites.

The great tract by which these settlers passed to their mountain settlements, or on toward the frontiers in the Ohio Valley, ran from Staunton westward, and was serviceable for wagons as far as the foot of the Warm Spring Mountain, in the pass at the head of Thompson Creek. Now there is a stage road, and the distance across the mountain is five miles, four-fifths of which is on the eastern side of the ridge, "where a succession of deep precipices and glens present themselves, environed with gloomy woods and obscure bottoms." To the eastern foot of this mountain, where the road now begins the ascent, the emigrants would come in wagons. The spot was known as the "camping-place," and here the wagons would be unloaded, the travelers' goods placed upon pack-horses, and the journey would be continued on foot or a-horseback, while the wagons returned eastward loaded with venison, hams and other produce of the mountain districts.

Down at the foot of the range on the eastern side was the Warm Spring which gave a name to the locality, and has now become one of the favorite watering-places of the State, with accommodations for 500 guests. How it appeared in its natural condition, then, we learn from Jefferson's "Notes on Virginia": "The Warm Spring," he says, "issues with a very bold stream, sufficient to work a grist-mill and to keep the waters of its basin, which is thirty feet in diameter, and the vital warmth, viz., 96° of Fahrenheit's thermometer. . . . The Hot Spring is about six miles from the Warm, is much smaller, and has been so hot as to have boiled an egg. . . . These springs are very much resorted to in spite of a total want of accommodation for the sick. Their waters are strongest in the hottest months."

At the Hot Springs hotels are now open every Summer, and both these resorts, as well as the Healing Springs, are reached by stage-coaches, over a splendid road from Clifton Forge.

The waters of these medicinal springs drain into Jackson River, which, a few miles below, receives Back Creek. The river then forces its way amid the hindrances of a hundred hills directly southward, until it has penetrated into the heart of Alleghany County. Here is old Covington, where there has been a settlement since the earliest days, and which is now a flourishing station on the Chesapeake and Ohio Railway. Near it was the Fort Young which formed the tower of refuge against Indians.

Some notion of the picturesque interest of the wild, rough district through which this young river progresses may be gathered from the description of a single cascade, called the Falling Spring. A stream comes down from the mountains, about twenty miles south of the Warm Springs, and about three-quarters of a mile from its source falls over a rock 200 feet into the valley below. The sheet of water is broken in its breadth by the rock in two or three places, but not at all in its height. Between the sheet and the rock you may walk across dry.

At Covington the river turns the flank of Warm Spring Mountain, passing through a grand gateway between that fine range and the noble range of Peter's Mountain, which forms its extension toward the south.

Peter's Mountain derived its name from Peter Wright, a famous hunter at the time of the first settlement, who was accustomed to hunt upon it. His house was near Covington, where they show an overhanging ledge called Peter's Rock, under which he was once confined by an excessive snowfall and nearly starved. After four days' famine he began to eat his moccasins, but before these useful articles had been wholly consumed he discovered and shot a deer.

Another traditional character in this region was Mad Ann, whose real name was Ann Bailey, for she had been the wife of an English soldier. During the wars with the Indians she very often acted as messenger between the forts—a part in which she was by no means singular, for the history of these mountains is full of incidents of daring, under similar pressure, on the part of woman. In the case of Mad Ann, however, this seems to have been a regular, enjoyable thing. She would mount astride of "a favorite horse of great sagacity," and ride with rifle over her shoulder, tomahawk and knife in her belt. When, at night, she wanted to halt in the woods, she would let her horse go free, and then walk back some distance on his trail before lying down to sleep. When the wars were over she devoted herself to hunting, and toward the end of her life emigrated to Ohio. She was a short, stout woman, very masculine in dress and behavior, profane, liquor-loving and a good boxer. Despite these forbidding features, which, it must be remembered, were not so remote from the general character of the people of that frontier then as they would be from that of its present inhabitants, she was welcome in every cabin on account of her services and her native talent, for she was capable and very intelligent. "Often," says an account of her, "she gathered the honest, simple-hearted mountaineers around, and related her adventures and trials, while the sympathetic tear would come down their cheeks."

Having crept between Peter's Mountain on the south and the Warm Spring mountain on the north, as one goes through a gate in a wall, the river is confronted by the great barrier of Rich Patch Mountain, and compelled to make a large detour to the north, around the end of this range, before it can resume its southeasterly course. From this assemblage of mountains it receives many tributaries, the channels of which are filled with wild and romantic beauty, and abound in trout. The little valleys they meander through, and the elevated woodland glades where they take their rise, are noisy with the merry voices of birds, and haunted by deer, which come nightly to sip of their clear, cold currents. Where there is an abundance of birds and deer predatory animals can sustain themselves, and these hillsides echo to the cry of the lynx and wildcat, or at rarer intervals reverberate the loud scream of a panther. Bears may be found by those who seek for them, despite the fact that every mountaineer is more or less of a hunter, and his rifle is as much a necessary part of his equipment as is his ax. For those sportsmen whose pursuit does not involve a gun, but the pliant rod and beguiling hook, this wild region is a paradise. Here and there trout have possession of a stream, and turn their speckled sides up to the sunshine in the ripples; and where trout are not, there leaps the black bass, stronger and more "game," if possible, than the trout, fighting hard for his life against the angler's strength and dexterity. Besides these, the river and creek pools abound in perch.

The most important of all the tributaries to Jackson River is a brawling stream from the north, draining Highland and Bath Counties down the long valley between Warm Spring and Mill Mountains. Its sources are close by those of the main stream, and the two forks, Bull Pasture and Cow Pasture, take their names from the spurs of the great North Mountain, in which they rise.

The valley is in many places broad and fertile, and at its centre, where the old stage road crosses, and where now the Chesapeake and Ohio Railway enters through the magnificent Goshen Pass, a rich farming community has been created.

Just here are the old Milboro Springs, where sulphurous water gushes up from the Devonian strata, supplying so many fountains of like character in this part of the State. The hills of Helderberg, limestone that diversify the surface of the valley by their irregular undulations, are pierced with innumerable caves, one of which is remarkable as being in shape the exact half-section of a cone, its naturally arched roof diminishing gradually to a point at the interior extremity. The most noted of all these caverns, however, is the famous Blowing Cave, which is hollowed to an unknown depth under a naturally bent arch of rock strata.

Its first describer was Thomas Jefferson. "At the Panther Gap," wrote this Nestor of Virginian literature and politics, "in the ridge which divides the waters of the Crow and the Calf Pasture, is what is called the Blowing Cave. It is in the side of a hill; is of about 100 feet diameter, and emits constantly a current of air of such force as to keep the weeds prostrate to the distance of twenty yards before it. This current is strongest in dry, frosty weather, and in long spells of rain is weakest." The constancy of this current, which concontinues with unabated force, has never been explained, so far as I know.

Some miles above this is another curiosity of nature in the shape of a geyser or intermittent spring, which gushes forth once in twelve hours, and having spent its force, becomes quiet until the next period of ebullition arrives. It is called the Ebbing Spring, and its water has force enough to turn a millwheel. There is another at Brock's Gap through the North Mountain, and a third in the valley of the North Holston.

Two miles below the Blowing Cave and the sulphur springs at Milboro are the "alum banks," which the Indians knew as the Wallawhatoola. Here, as at the Rockbridge and Bath alum springs, the waters collect slowly from the crevices of dark pyritous shales, and their chief constituents are sulphates of alumina, lime, magnesia, potassa, soda and iron, with more or less free sulphuric acid and lithia. Springs of this class are very numerous in the Devonian shales of Virginia. At all of these springs, pleasure resorts, hotels and sanitariums have been built, which are thronged with Summer visitors.

In this region, too, are extensive deposits of alum earth and copperas clays, immense quantities of which, in Maryland and elsewhere, are applied to the manufacture of alum and green vitriol. Marl and magnesian earth (of which epsom salts is made), also occur in these valleys.

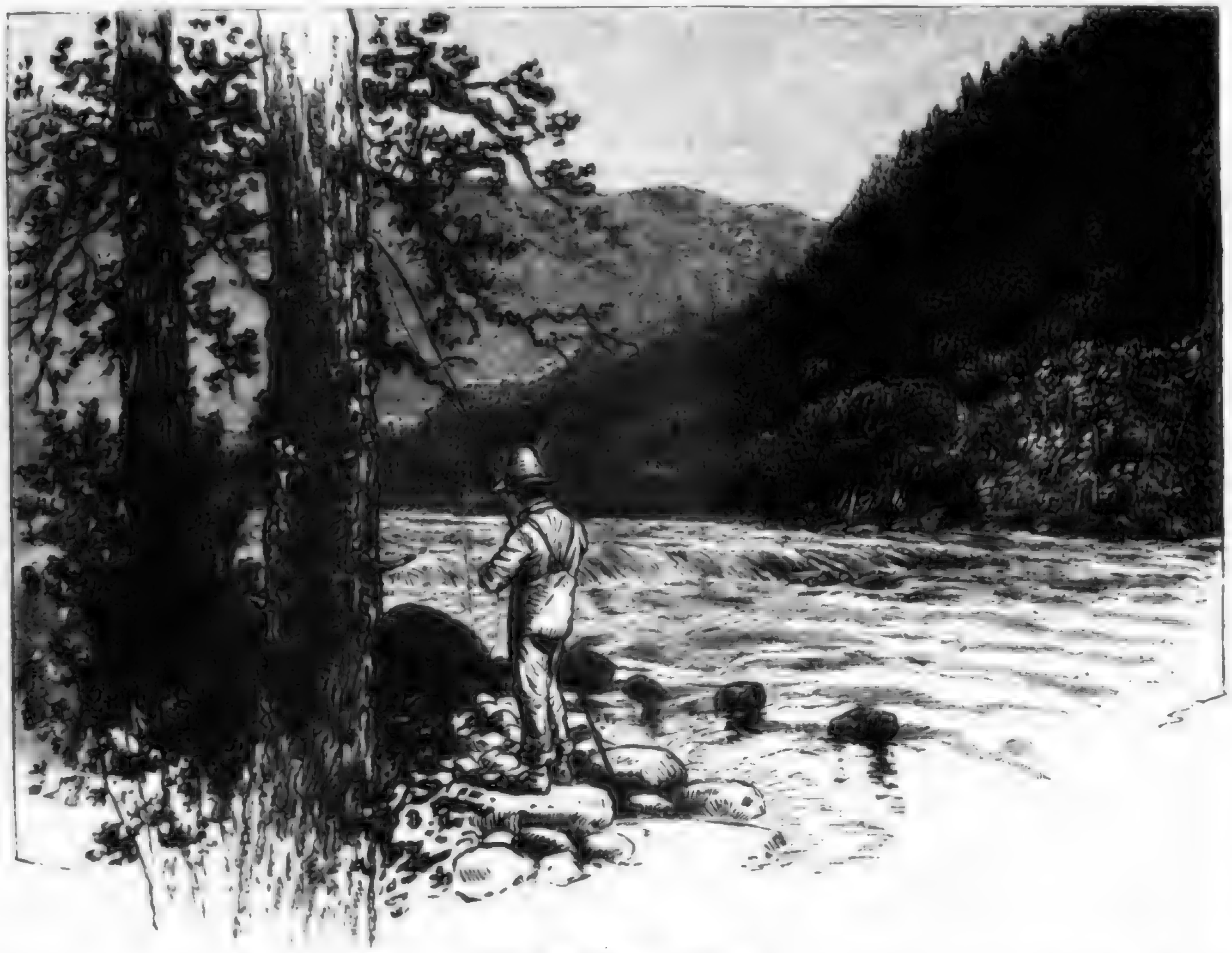
From Goshen Pass the Chesapeake and Ohio Railroad follows down the Cow Pasture, crosses it, and turning west, strikes the bank of Jackson River at Clifton Forge, a new town in the midst of an iron-mining and iron-making district, created by this industry, and by the fact that here is the western terminus of the Richmond and Alleghany Railway, and its junction-point with the Chesapeake and Ohio.

Clifton Forge is in the centre of one of the most extensive iron-producing regions in the United States. All of the mountains are seamed with beds of bog ore, some of which is so red and pure that it has been used by the people as a rude dye, and by strata of limonite or smaller veins of magnetic and specular ores, which are suitable for making Bessemer steel. The mines lie both in the valleys and on the heights. Rich Patch Mountain is everywhere dotted with them, and some of the finest and largest furnaces in the South are situated among these crowded hills. The Low Moor, Callie, Wilton, Roaring Run, Grace and other furnaces, are examples of these, to several of which, away from the main lines, branch railways have been built. Not only does the presence and easy accessibility of these deposits of iron ore (most of which are mined in open, quarry-like excavations) render this a highly profitable region for iron manufacture, but its near neighborhood to the vast coal-fields of West Virginia, and the unrivaled coke-producing localities of the Pocahontas and Flat-top districts, enables the manufacturer to command all the elements of success at the least cost.

The effect of this flourishing iron industry upon the region is marked and gratifying. The population of these mountain counties has remained almost unchanged in amount and in character for the last century. If some immigration came in, that and the natural increase were neutralized by the constant emigration westward. As it was the more wideawake and enterprising part in each community, on the whole, which moved to the prairie States, and as few influences reached these remote valleys from the cities or the progressive coast country, the change in the people from decade to decade was imperceptible, until very lately. The entry of the railways bringing the world of business and fashion before the eyes of the simple mountaineers every day, and the residence among them of the managers and skilled workmen about the mines and furnaces, have aroused their minds and put money in their pockets. The people are, therefore, increasing in numbers and intelligence and wealth. Most, if not all, of the valleys between the rocky and frosted ridges are fertile and under cultivation. The ironworks of various kinds, introducing little communities of non-farming population into the mountains, furnish markets always open to the mountain farmers and cattle-raisers, and the effect of this encouragement is good. The lumbering interests are being largely developed, also, and are destined to a still higher utilization, while year by year the beauty and healthfulness of the region is attracting more and more Summer visitors to the upland farms and brook-sides. All this civilizes the people and enhances the value of their property. Yet, in enjoying it, they suffer somewhat in the loss of that primitive, picturesque simplicity, and that good-natured equality and independence which characterized their fathers.

The surroundings of Clifton Forge are lovely, but the town itself—new, noisy, smoky and full of rough laborers—is by no means the most charming place in Virginia. Three miles to the westward is Low Moor Furnace; three miles eastward, Wilton Furnace; while Longdale and various other iron-smelting factories are close by. The ore is a red hematite, and occurs in great solid masses, mined for the most part by open, surface excavations. At Wilton a pretty village has grown up around the improved blasting furnaces which stand on the hillside overlooking wide fields of hay and grain.

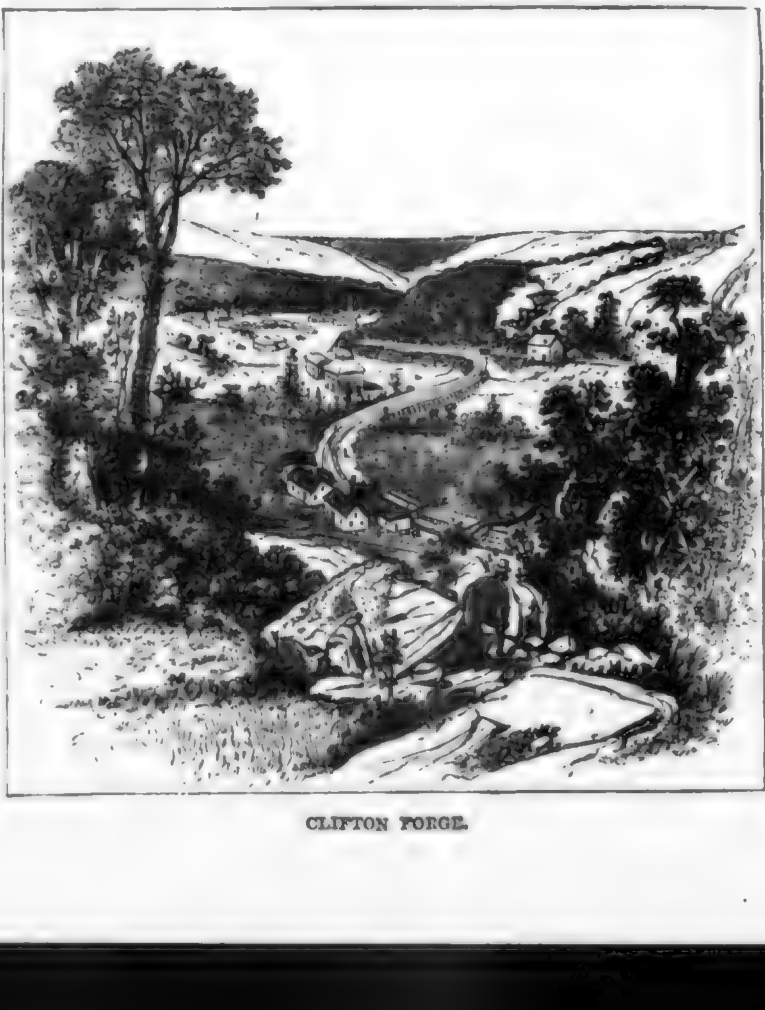
XUM



VIEW ON THE UPPER JACKSON.

Where the Cow Pasture and the Jackson come together, the northern end of the Rich Patch (or Rich's Patch, as the older maps spell it), and the southern end of Mile Mountain, approach very closely together and frown at one another in bold promontories across Iron Gate—a narrow gorge, where the contracted current races swiftly down its narrow bed and contrasts the white of foaming breakers with the sombre hues of dense woods and weather-stained rocks.

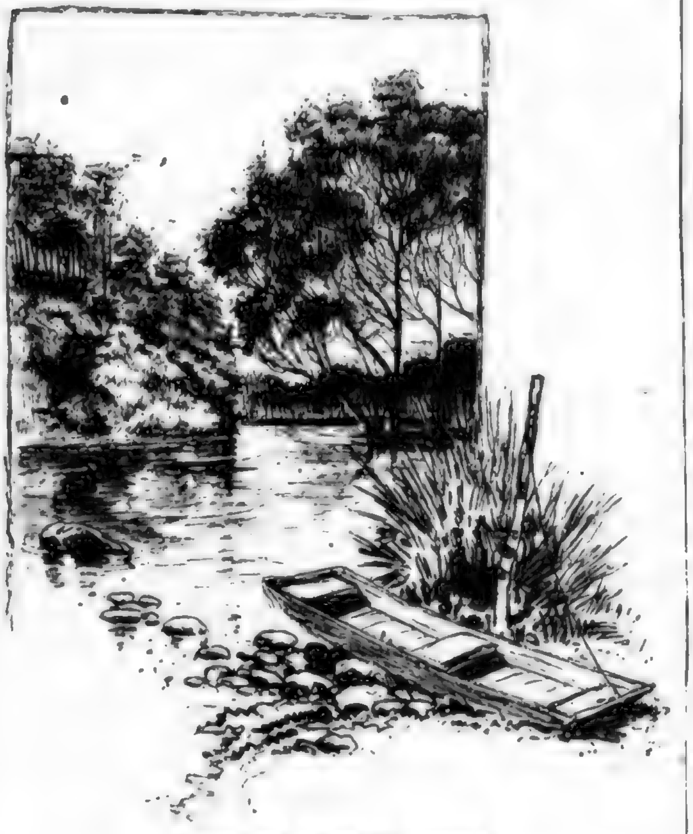
The Cow Pasture is a pretty stream, and, looking up its valley, you get one of the finest pictures to be seen in the whole breadth of the mountains. The lowlands in the foreground are green with lush meadows, or yellow with ripening grain. About the few houses that are visible cluster orchards and shade trees, over which the fraternal elm spreads its beneficent arms. Along the Cow Pasture, and bordering the little rills that come down to it from the higher ground confining the valley on each side, grow dense thickets of willows and water-loving trees, often knit together by a network of vines and trailing shrubs, that makes this barrier almost impenetrable. Behind the farms in the lower meadow-land rise the sloping fields that occupy the base of the hill; but presently these are replaced by pasture-land fenced into large fields, which soon gives way to the woodland and brushy tracts that cover all the higher ridges. The sharpness of feature apparent in these hills becomes obliterated as our eyes are lifted toward the further end of the valley, and there we find only an endless series of spurs and foothills dovetailing into one another from side to side, all blue with haze, yet each preserving some delicate distinction of tone which marks its silhouette among its



CLIFTON FORGE.

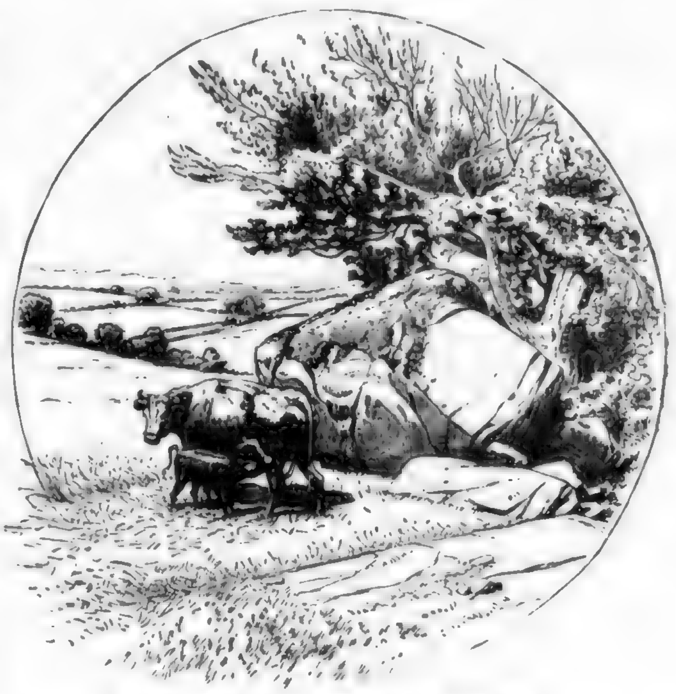
fellows. It is astonishing both how subtle a difference of tint we can apprehend, and how efficient the slightest variation is in marking off the mass of each hill from its adjoining one. Yet by-and-by, in the extreme distance, even these distinctions of light and shade are lost, and an unspeakably soft and charming color blends all the hills into one lofty background against the cloudless horizon.

The rearmost, overtopping range, is the Warm Spring Mountain, a long, level, even-crested wall, representing a single gigantic fold of the strata. The Rich Patch, the North, and all the other great mountains, present much the same even and wall-like appearance from this (the eastern side), though notable exceptions may be seen in some subsidiary groups of hills up the Cow Pasture Valley, whose slaty structure gives them ragged outlines and pinnacles along the crest in pleasant variety. Seen from the west, however, the aspect of all these parallel ranges is much more broken and their summits seem to carry peaks and saddles. The Rich Patch, for example, is bordered along its western foot by a series of lofty hills, which form a secondary parallel range, the peaks of which often rise as high as those of the main mountain. It is in this broken western half of the Rich Patch chain that the iron mines and furnaces chiefly occur.



ABOVE THE NATURAL BRIDGE.

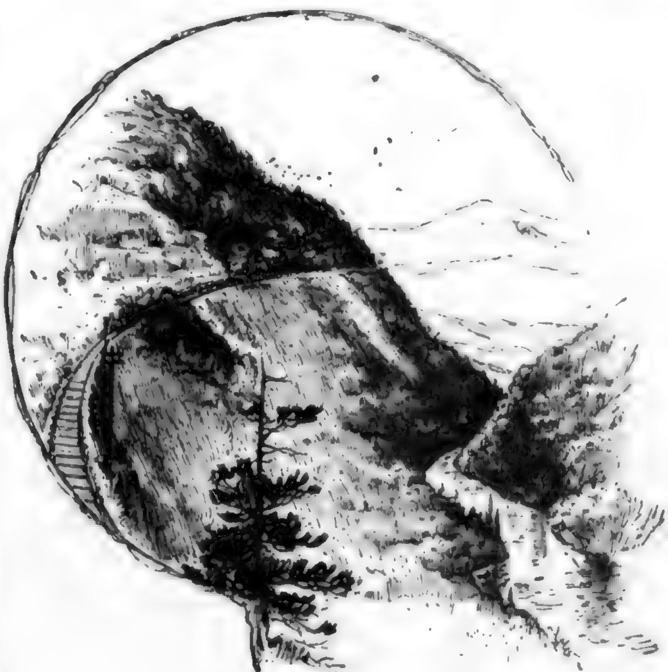
The confluence of the Jackson and the Cow Pasture Rivers, in popular parlance, forms the James—"the river of Virginia." There is no reason why the stream should not be called the James to the very sources of Jackson River, and the latter name relegated to history, for it is one and the same river from Highland County to Newport News. In Jefferson's time the James was reputed to be properly so-called only up as far as the entrance of the Rivanna, half way between Richmond and Lynchburg, the name Fluvianna being given to that part of the river between Columbia and the Iron Gate. But it is simpler to set aside these artificial and misleading distinctions, and call it the James all the way from the mountains to the sea.



IN THE VALLEY OF THE COW PASTURE.

Magnificent scenery is produced by the success of the river in forcing a passage for itself through the mountains that intercepted its coastward path. Its swift but narrow current has plowed deep gorges athwart the hills, leaving exposed enormous cliffs, which show at a glance how terrible have been the throes of the rigid earth in this region under the pressure of internal heat. In the faces of the cliffs you will see great folds and arches of strata, or long slanting lines breaking suddenly and joined against a mass of strata set at an entirely different angle; or rocks fairly crumpled up, as a wad of carelessly crushed paper would look when cut through. These rocks are covered with moss, lichen and ferns, fed by the abundant moisture, while every ledge that can furnish a foothold is adorned with flowers, green herbage and clinging shrubbery.

The river winds almost interminably, dodging and twisting hither and thither in seeking the easiest way out of the hills that crowd it upon each side, and compel a



CROSSING THE ALLEGHANIES.

XUM

zigzag course. The descent, of course, is very rapid, and the river becomes one long cataract, much like that of the French Broad between Asheville and the warm springs in Western North Carolina; its water constantly curling into white feathers, and bearing patches of froth and bubbles, is a beautiful clear green, such as I have seen in the snow-fed, swift-racing rivers of the Rocky Mountains, and such as you may see at the whirlpool below Niagara. This pure, transparent, perfect green is uncommon anywhere, but the upper James has it. I suppose it is due to its purity and to the fact that, by its incessant turmoil and tossing, the water is thoroughly impregnated with air clear to the bottom.

In little nooks and bottoms along the river are many old farms and settlements, and upon several of the side streams dashing down from the hills were long ago placed mills, whose old flumes and wheels are now dilapidated, hidden with cushiony moss and the green vails of confervoid growth, and thus afford enchanting pictures for the artist. Farmhouses, surrounded by their groups of out-buildings, stand here as of yore, recalling the palmy days of this region, when the highway through this gap was traveled by a constant procession of freight-wagons taking grain, etc., to the canal, or returning with loads of merchandise, and each farm-owner was a small prince. Now, the prosaic railway skirts the water, creeps underneath the dizzily tall and splendid cliffs, leaps the river on iron bridges, or by its tunnels opens a passage through the promontories in two minutes, which gave the old teamster a whole morning's labor to surmount.

Nothing is lost to the picturesqueness of nature, something, even, has been gained; but the peculiar native charm of the humanity and conduct of life in these remote Virginian highlands is disappearing from the ridges and valleys about the headwaters of the James, and should be quickly sought by those who take delight in originality and primitive ways.

OUR DOMESTICATED OTTER.

One fine day in early Autumn, while straying along the banks of one of the sparkling little trout streams which appear to be at once the cause and the purpose of those lovely winding valleys so numerous in Northern Devon, our attention was drawn, by a faint, distressed chirping sound, to a small, dark object stirring in the grass at some distance from the stream. We hurried to the spot, and there saw, to our great surprise, wet, muddy, and uneasily squirming at our feet, a baby otter! Poor infant! how came it there? By what concatenation of untoward circumstances did the helpless innocent find itself in a position so foreign to the habits of its kind? Its appearance under conditions so utterly at variance with our experience of the customs and manners of otter society, was so amazing, that we could scarcely believe our eyes. However, there the little creature undoubtedly was; and congratulating ourselves on this unlooked-for and valuable addition to our home menagerie — for these animals are rare, and to light upon a young scion of the race in evident need of a home and education was quite a piece of good luck—the forlorn bantling was promptly deposited in a coat-pocket and proudly borne homeward.

Introduced to the family circle, "Tim"— as he was afterward duly christened—became at once the centre of domestic interest and unceasing care. To feed him was necessarily our first consideration. A feline or canine mother deprived of her young was suggested as a suitable foster-mother; but, unfortunately, no such animal was at hand, and meantime the creature must be fed. We therefore procured an ordinary infant's feeding-bottle, and filling it with lukewarm cow's milk, essayed thus to make good the absence of mamma-otter. At first the little stranger absolutely declined even to consider this arrangement, and in consequence pined somewhat; but in the end the pangs of hunger wrought a change in his feelings, and after several energetic though unscientific attempts, he overcame the difficulties of his new feeding apparatus, and was soon vigorously sucking. For a time, all went well. Tim, with commendable regularity, alternately filled himself with milk and slept peacefully in his basket of sweet hay. But at the close of the second day a change came over our interesting charge; he was restless and uneasy during the night, and in the morning refused to feed, and appeared to be suffering pain. Finally, his respiration became labored and difficult, and for a whole day and night our hopes of rearing him were at the lowest ebb. But at the end of that time, to our great satisfaction, the distressing symptoms began to abate, and in a few hours had disappeared, and the convalescent returned *con amore* to his bottle. Believing his attack was attributable to over-feeding, we henceforth diluted the cow's milk with warm water, and removed his bottle at the first sign of approaching satiety, nor nor did we again administer it until his demands for sustenance became vociferous and imperative. On this system we were successful in rearing him in the face of many prophecies of failure.

At this early stage of his existence, being exhibited to admiring friends, he crawled laboriously and flatly about on the carpet, with a decided preference for backward motion; but if he encountered a perpendicular surface, such as the sides of his hamper or a trouser-leg, he would, with the aid of his claws, climb up it with considerable agility. He distinctly showed a love of warmth, and gave us to understand that he appreciated caresses, by nestling down in feminine laps, and ceasing his plaintive cry while our hands were about him. On awakening from sleep he would begin, as do ducklings and chickens, with a gentle reminder of his existence and requirements. If no notice were taken of this, the note—which was something between the magnified chirp of a chicken and the very earliest bark of a puppy—would steadily increase in power and insistence, until it became an absolute clamor. When his bottle was given to him, he would seize on the leather teat and tug at it, and plunge about with a violence and impatience which defeated its own end, and woe to the unwary or awkward fingers which came in the way of the tiny fine white teeth at this moment!

Obstacles overcome and success attained, Tim settled down to steady, sober enjoyment; the webbed paws were alternately spread and closed like a cat's when thoroughly content, and the tail curled and uncurled and wagged to and fro, as does a lamb's when happily feeding. After the lapse of a few days, our new pet showed decided signs of intelligence and a sense of fun; he would run round after one's finger in a clumsy-lively way, and a jocular poke in the ribs would rouse him to an awkwardly playful attempt to seize the offending digit. In less than three weeks he knew his name, and scuttled across the room when called, followed us about the garden, and endeavored to establish friendly relations with a pet wild rabbit, which was furiously jealous of the new favorite, and administered sly scratches, and "hustled" him on every possible occasion.

About this time, he also acquired a charming habit of beginning, the moment the sun rose, a clamor which deprived half the household of further sleep, and which was only to be quieted by his being taken into some one's bed, where he would at once "snuggle" down and lie motionless for hours. At first we resisted this importunity on the part of Tim, partly because an otter is not exactly the animal one would select as a bedfellow, and partly because we could not think it a desirable or wholesome habit for the creature itself. But Master Tim was too much for us. "If you won't let me sleep with you, you shan't sleep at all!" he declared in unmistakable language, and by dint of sticking to his point he carried it.

At the end of the first month of his civilized life, some one gave him a scrap of raw meat; and after that, though he ate bread and milk very contentedly between times, he made us understand that his constitution required the support of animal food, and was never satisfied without his daily ration of uncooked flesh. Fish, strange to say, he seemed to prefer cooked. When we were seated at meals, a hand held down would bring Tim quickly to one's side with an eager look in the small yellow eyes; his cold nose sniffed at one's fingers with rapid closing and unclosing of the curiously formed nostrils; the softly furred head would be thrust into the palm in search of the expected dainty morsel. If none were to be found, his temper would be sadly ruffled, sometimes to the extent of inflicting with his teeth a sharp reminder that not even an otter's feelings should be trifled with!

As he grew older, he developed an amount of intelligence scarcely to be expected from the small brain contained in the flat and somewhat snake-like head; he showed decided preferences for some members of the family over others. If permitted, he would follow everywhere at our heels like a dog, and played with the children after the manner of one, but with awkward springs and jumps that put us in mind of a particularly ungraceful lamb. He occasionally made quite energetic assaults on the ankles of some of the ladies of the family; and if he perceived that the owner of unprotected ankles went in fear of him, showed a malicious pleasure in renewing the attack at every favorable opportunity.

When the children went for a country ramble, Tim frequently accompanied them, taking the greatest delight in these excursions. He would be carried until beyond danger from wandering dogs, and then, being at liberty, the fun would begin. Master Tim, all eagerness, trotting on before in search of interesting facts, the children take advantage of a moment when all his faculties are engaged with some novelty attractive to the otter mind, to vanish through a neighboring gate or behind a haystack. The unusual quiet soon arouses Tim's suspicions; he looks round, and finds himself alone. The situation, from its strangeness, is appalling to him; he utters a shriek of despair, and scurries back as fast as his legs can take him, squeaking loudly all the time. If he should chance, in his fright, to pass by the hiding-place of his young protectors without discovering them, great is their delight. One little face after another peers out and watches, with mischievous glee, poor Tim's plump and anxious form trundling along as fast as is possible to it in the wrong direction! But very soon the humor of the situation is too much for some young spirit, and a smothered laugh or a half-suppressed giggle reaches the tiny sharp ears, and Tim quickly turns, and with another shriek of mingled satisfaction and indignation, gives chase to his playful tormentors. Once arrived in the open meadows, where this novel game of hide-and-seek is not possible, it is Tim's turn. Still, he follows obediently enough, frisking and gamboling in the fresh soft grass, until one of the innumerable small streams is approached. As soon as he catches sight of the water, he is off. At a rapid trot he hurries to the brink, and with swift and noiseless dart, in a flash he has disappeared in the current, and in another reappeared some yards away. Rolling over, turning, twisting, diving, he revels in his cold bath, and it is sometimes a matter of no small difficulty to get him out of the water. A cordon of children is formed—the two biggest with bare feet and legs to cut off his retreat up and down stream—which, gradually closing in on him, seizes him at last; and reluctantly he is compelled to dry himself in the grass preparatory to returning to the forms and ceremonies of civilized life.

THE LITTLE ONES IN BED.

A row of little faces by the bed—
A row of little hands upon the spread—
A row of little roguish eyes all closed—
A row of little naked feet exposed.

A gentle mother leads them in their praise,
Teaching their feet to tread in heavenly ways
And takes this lull in childhood's tiny tide
The little errors of the day to chide.

Then tumbling headlong into waiting beds,
Beneath the sheets they hide their timid heads,
Till slumber steals away their idle fears,
And like a peeping bud each face appears.

All dressed like angels in their gowns of white,
They're wafted to the skies in dreams of night;
And heaven will sparkle in their eyes at morn,
And stolen graces all their ways adorn.

THE PIKE.

The Pike is one of the native fish of North America, which country has been not inaptly termed the headquarters of the family; for while Europe has only one species, this continent has several, and among them one that may well be called the chief of the clan.

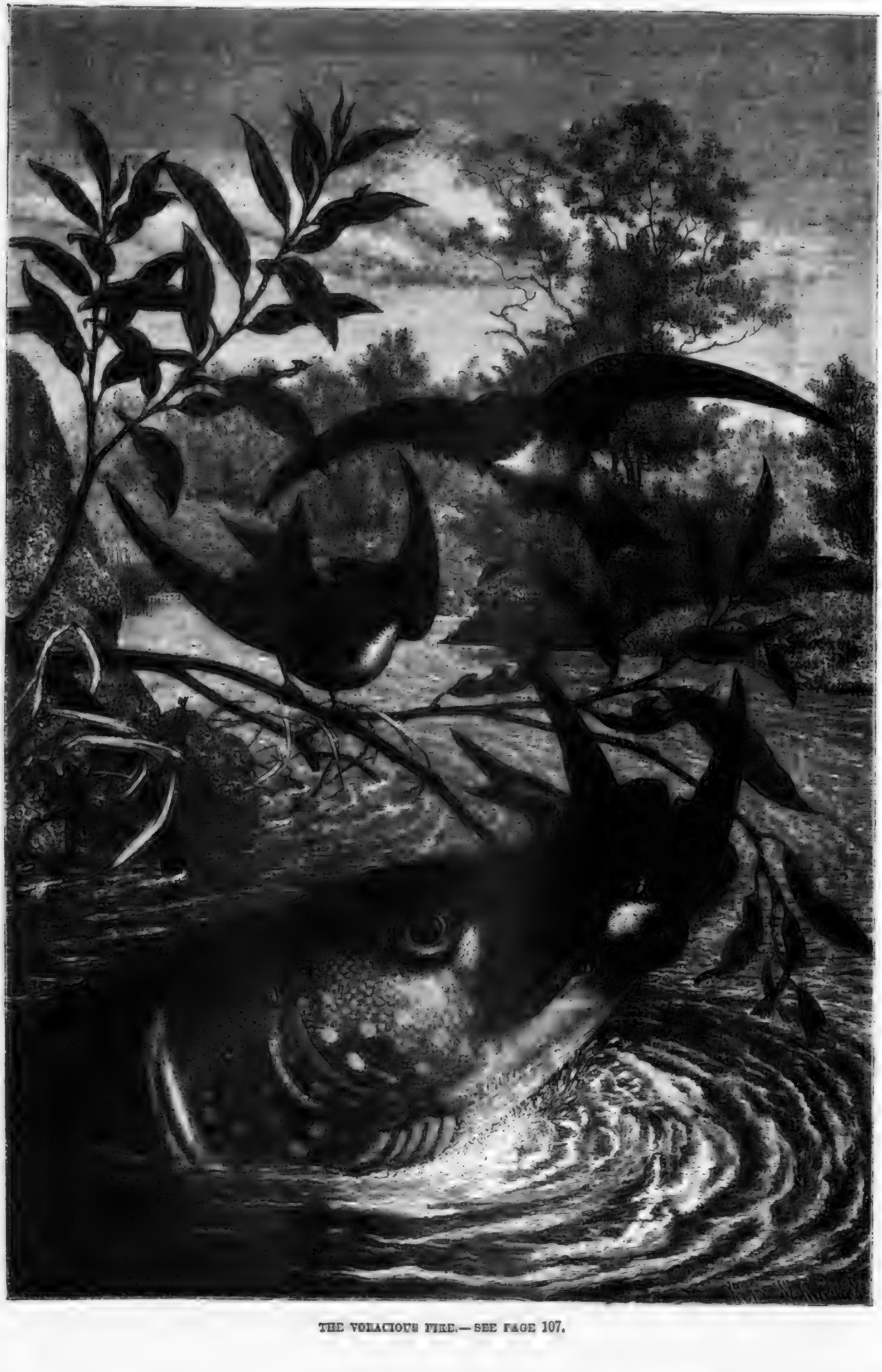
The common pike abounds in all our waters from East to West, and many have supposed that the European variety may have been brought over from America; but Yarrell tells us that pike are mentioned in an Act of the sixth year of the reign of Richard II., in 1382, or long before North America was even discovered.

Though spread over a large area of the globe, being, it is said, geographically distributed with the spruce-fir, the pike undoubtedly arrives at its greatest perfection in the cooler regions. Its average weight is from five pounds to ten pounds in ponds and rivers, but in the Great Lakes it often attains a much more considerable size, possessing also when taken from these clear and beautiful waters the advantage of being perfectly free from the earthy taste which is in general so great a drawback to its flavor.

August, September, and October are the best months for trolling, as the pike are then in first-rate condition, and take most freely; for though they may be captured with the natural bait throughout the Summer, either morning or evening, and if the sky is at all cloudy at almost any hour of the day, they are generally lazy and indifferent to food in hot weather, and not easily moved. In Winter they will take readily any ordinary bait dropped through a hole cut in the ice, darting on it at once, from beneath the overhanging stones and stumps to which they retire at that season.

On the lakes it is best to fish from a boat, which should

XUM



THE VORACIOUS PIKE.—SEE PAGE 107.

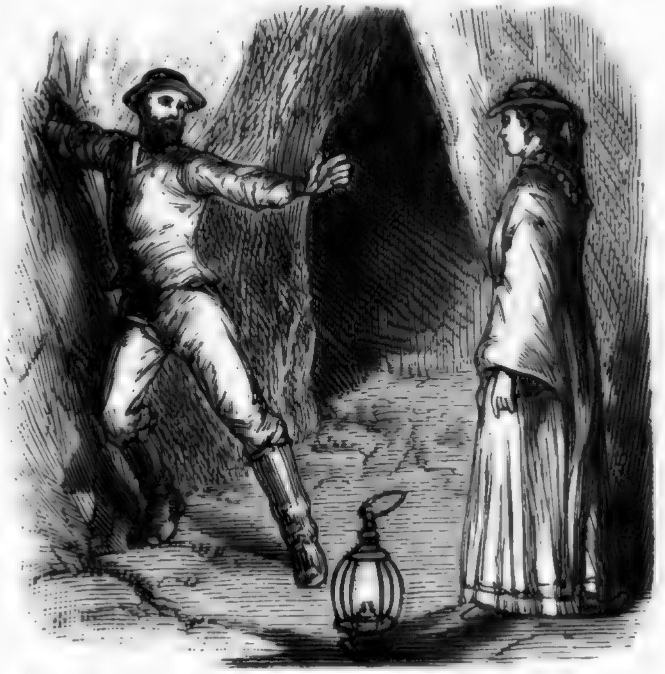
XUM

be stationed over the weed-grown bottom of some quiet bend or inlet where there is no current, and where the surface of the water is comparatively smooth. The boat should not be too close to the shore, and the greater the length of line the better, consistently with convenience in casting the bait, which, it is scarcely necessary to remark, cannot be too lightly dropped into the water. The best sized hook is a No. 5 salmon-hook. In river trolling, where slow running streams are bordered by reeds, or covered with patches of surface weeds, it is better to fish from the bank.

During the Fall pike appear generally to prefer deeper water than in Summer, at which season they frequent the middle depths or bask in the sun under floating water-plants. Though the pike is not gregarious, yet where one is taken others will always be found in the same neighborhood—and the troller should by no means abandon his ground under the impression, which is a very common one, that it is a solitary fish—an error first propagated by Isaak Walton, who says: "The pike is observed to be a solitary, melancholy, and a bold fish: melancholy because he always swims or rests himself alone, and never swims in shoals or with company, as roach and dace, and most other fish do; and bold because he fears not a shadow, or to see or to be seen of anybody, as the trout, and chub, and all other fish do."

The most successful lure, when it can be procured, is the "pickerel frog," a small and singularly marked creature. A minnow, or a small "lake-herring," bream, or any other similar fish will, however, always answer. Artificial bait or flies seldom attract, and the angler need not waste his time or patience in experimenting with them.

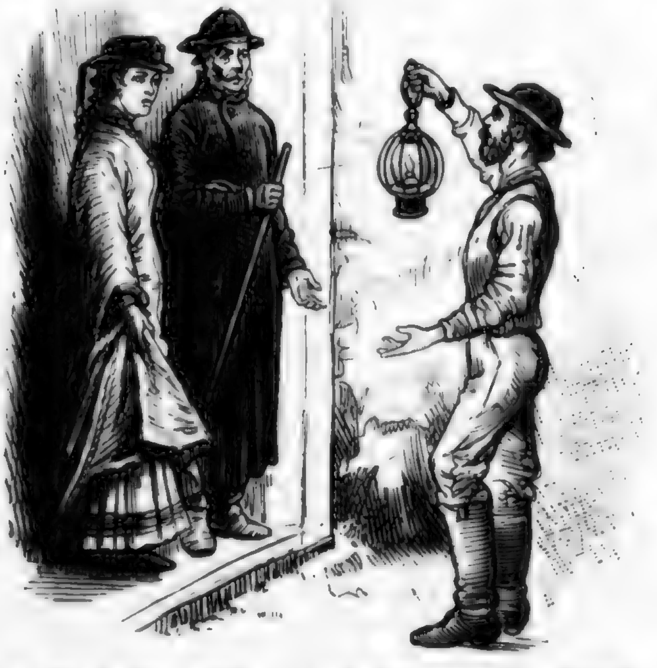
A large pike will frequently run the whole line off the reel, darting away with a strength and velocity which call into play all the skill of the angler, who should be provided with a good rod with a stiff top, and plenty of strong silk line, the nature of his other tackle being matter of choice and preference, though gorge-tackle is undoubtedly the most simple and efficacious.



IN THE MABERLY MINE.—"WITH MY ARM IN THE WALL, I TURNED HALF ROUND TO THE OPENING OF THE CHAMBER, AND THERE, TO MY HORROR, STOOD EVE GUION."

Pike are also taken in other ways, as by spearing, which in Winter is effected through a hole cut in the ice, to which the fish are attracted by bait; and in Summer by torchlight from a canoe or a *scow*, and by other means even more uninteresting to the sportsman.

The pike is the very type of voracity, and not only every fish that swims even almost its equal in size is pounced upon by it, but birds flying near the surface or perched on a branch that the rapacious fish can reach at a spring. The most remarkable case of its voracity was, perhaps, that which occurred at a fishpond in the estate of Baron Rothschild, where a pike seized the arm of a little girl who was dabbling in the water with her hand; the pike seized her with such a grip that he nearly dragged her into the pond, and would have done so had not her cries brought a keeper to the spot. Even then the man with difficulty compelled the fish to relax its hold.



IN THE MABERLY MINE.—"I SAW BEFORE ME TWO PERSONS, WHOM OF ALL HUMANITY I HAD LEAST WISHED TO MEET—EVE GUION AND HER FATHER."

IN THE MABERLY MINE.

By Charles L. Hildreth.

"John Wallace!" called the mine-superintendent through the speaking-pipe; "some visitors are coming down in the cage. You will be kind enough to show them through the tunnels."

"Visitors!" I repeated to myself. "I must be lackey, too, as well as drudge! Well, so be it. It is only another straw to the load I am carrying. If it breaks my back, so much the better. I shall be done with it!"

The world has little respect for those whose code of honor leads them aside from the broad highway of commonplace.

When, at my father's death, finding his estate heavily encumbered, I had deemed it my duty to place it at the disposal of his creditors, I found myself, socially speaking, in ice-water. Those who had known me in my happier days knew me no longer, and houses where I had once been a welcome guest were now as impenetrable as their owners' ignorance of my existence.

I could have borne all this well enough had only one home remained open to me—the home of Eve Guion.

In the days when her wealthy father looked with favor upon the intercourse of his daughter and the landowner's son, I had some wild hopes about her.

She was a beautiful girl, and, as I had believed, sympathetic. I had believed, too, that I had seen glimpses of something in her face that proved my hopes not to be so wild as they seemed.

But that, too, was over. A polite note from her father informed me that his daughter could henceforth dispense with my attentions; and, as I received no intimation to the contrary from Eve herself, I concluded she, too, had decreed my ostracism. After this, I lost my hope and made no attempt to better my worldly condition.

I left the village, and, after two years of wandering, often in destitution, I stranded myself on the Maberly Coal Mine as gang-master in the pits.

Our mine had a doubtful reputation, having been the scene of several distressing accidents. Consequently, we were rarely troubled by visitors from the upper earth.

This was a godsend to me. I could manage to endure the life I was leading only on condition of not being too frequently reminded of the life from which I had been exiled. The idea of encountering persons whom I had known in better times was a constant terror to me.

It may be imagined, therefore, with what feelings I awaited the descent of the visitors who had been signaled from above.

As the cage stopped upon the level where I stood with my lamp in my hand and the passengers alighted, I recognized them with feelings of downright misery. I saw before me the two persons whom, of all humanity, I had least wished to meet—Eve Guion and her father!

Had they heard of my whereabouts and come to witness my degradation? No. As cold and worldly as I believed Eve to be, I could not imagine her capable of such mean malice.

Who could identify the name of gang-master John Wallace with Wallace Grover, *ci devant* gentleman? Besides, I remembered that Mr. Guion was a shareholder in the Maberly Mine. It was merely a simple sight-seeing tour, after all.

Two years of hardship and the growth of a heavy beard had changed my appearance, so that I was sure neither father nor daughter could possibly recognize me.

With strict control over myself, I could show them through the mine and dismiss them none the wiser. Now that they had come, too, I was glad of the opportunity of seeing the woman I had loved—still loved—once more.

I stepped confidently forward, therefore, and introduced myself as the guide, John Wallace. Eve looked at me closely, but, I thought, only with an expression of curiosity as to the looks of a man whose life was spent underground.

My head swam and my heart beat thick and loud as I stood before her—more beautiful, because more serious and womanly, than when we had been intimate two years before.

I noticed that her face was a little paler, and that there was a look of sadness in it that was new to me.

The season that I had spent in wretchedness, then, had not been wholly free from sorrow for her. Not, of course, on my account; such a notion never entered my head.

"Have you been here many years?" she asked, as we were preparing to descend into the galleries.

"Years enough, madam, to know the mine thoroughly," I answered, evasively.

Mr. Guion looked at me, inquiringly.

"You speak like a man of education, my good fellow," he said. "Do they put men of your stamp into such positions as yours?"

"Men of my stamp have few claims which the world is bound to respect," I answered, gruffly. "You are here to see the mine. Be kind enough to follow me."

"My father will have more than enough to do to guide his own steps," said Eve, coming to my side and quietly placing her hand on my arm. "I must trust to your gallantry, Mr. Wallace."

I made no reply, but wondered if, woman as she was, she had no faraway hint of the cause of that sledge-hammer beating of my heart under her round arm.

We remained in the galleries two hours—more than twice as long as was necessary to their thorough inspection. The old man was growing impatient, but the gloomy pits and chambers seemed to have an unaccountable fascination for Eve Guion. She loitered, on one pretext or another, until I began to fear that I must have betrayed my identity to her quick eye.

Her face had grown strangely sad and anxious. I saw, too, that when she thought herself unobserved, she watched my face intently. Had she detected me, and was she seeking an opportunity of making her discovery known without betraying me to her father?

I determined that she should not accomplish her design. I knew very well that I should lose my self-control, and all of my love, bitterness and despair would burst out in a torrent.

I was careful, therefore, to avoid being alone with her for a moment. And I soon saw that I had guessed aright. She was endeavoring to separate me from her father that she might speak to me.

But I foiled her quietly but skillfully, and, after the galleries had been explored twice over, and there was no longer the shadow of a pretext for remaining, she finally prepared to depart.

As we entered the upper level, we passed the dark opening of a disused chamber, which I deemed unsafe to be visited.

Eve's eye caught sight of it.

"Here is a chamber we have not seen," she said.

"No, madam," I interposed. "It is no longer worked. The water has broken into it twice, and it is considered dangerous."

"I mean to see it at all events," she replied. "Father, wait for us here. Mr. Wallace will not refuse to guide me, I am sure."

She cast a strange, significant look at me, which said almost as plainly as words:

"I know you, Wallace Grover, and I mean to speak to you in spite of your caution."

Then she entered the chamber.

But she had miscalculated my tact. I turned to her father and requested him to enter with me in order to dissuade her from her rash adventure, and we followed her together. She gave me a reproachful look as we entered, and I heard her sigh.

The moment I put my foot into the chamber, my senses, trained by long experience to note the varying phenomena of the under world, detected a hint of coming danger.

There was a faint rumbling in the bowels of the earth. The air was close, and had a taint of electricity in it—similar to that which precedes a thunderstorm. There was surely peril in the mine, but how and whence it would come I could not guess.

As I turned to urge my visitors to a hasty retreat, I caught sight of some small fragments of wet earth dropping from the wall near at hand, followed by a jet of water. Then I knew what was coming.

"Out! out for your lives!" I cried, springing toward the wall. "The water is bursting into the mine. Ring for the cage and give the alarm!"

The old man needed no second warning. With a cry of terror he sprang out of the chamber, and the next moment I heard him give the alarm. Then followed the shouts and trampling of the escaping men. I knew if I could hold the water in check for ten minutes, I could save the lives of every one of them. As for my own—well, one life, and that a useless one, seemed a good exchange for a hundred fathers of families.

When I first saw it, the jet was no larger than a man's finger; but in a moment it had enlarged to the size of my arm, and a heavy stream of water began to pour into the chamber.

There was no apparatus at hand, neither clay nor sand-bags to check it, as I well knew.

A happy inspiration came to me. With a Titanic effort I managed to thrust my arm into the fissure, and for the time being I succeeded in checking the leak.

Then, with my arm in the wall, I turned half-around toward the opening in the chamber, and there, to my horror, still stood Eve Guion. I saw that her face was very pale, but firm and self-possessed.

"What are you doing here?" I cried. "This place will be full of water in five minutes."

"And what are you doing here?" she asked, quietly.

"My duty," I replied. "I am trying to hold this stream in check until the men escape."

"Then you will be drowned," she exclaimed.

"What of that? Better one than a hundred. But go," I entreated. "I tell you you have only a bare chance to get out as it is. The water is pressing harder every moment. It will soon be too much for my strength."

"Then I will stay and help you, Wallace," she said, in a strangely gentle voice.

"Ah, you know me!" I cried.

"I have known you from the moment I entered the mine. I came here to see you."

"To taunt me with my poverty!" I cried. "When your father turned me away from your doors, when I became outcast and wretched, I thought I had the right to hide my misfortunes from your eyes."

"It is because my father used you so cruelly that I am here," she said. "I was not to blame, Wallace. I knew nothing of it until you were gone. Since then I have tried to learn of your whereabouts in order to let you understand my feelings. It was only yesterday that I heard of John Wallace in the Maberly Mine, and on the bare chance of identifying him with Wallace Grover, I influenced my father to bring me here."

"Well," said I, sorrowfully, "it is too late to think of the past now. Go, Eve. Go and keep poor John Wallace's secret. It will soon be over with him."

"You persist in remaining here?" she asked.

"I must," I said. "I should be a coward and a wretch to desert my post now."

"Then," she replied, quietly, "I will stay with you."

"Why?" I asked, amazedly. "Are you jesting with me?"

"Can I jest with death, Wallace, or—love?"

Then, before I could comprehend her words, she came to my side, as I stood with my wrist in the wall, and putting her arm around my neck, drew my cheek down upon hers."

"It is hard to die so young, Wallace," she said, sweetly, "but it would be harder to live without you. In the hour of death, my dear, we can dispense with false delicacy. I know that you have loved me many years, and I have returned your love. If we have met again only to die, death at least cannot separate us."

With death staring me in the face—not five minutes off—I have never known a happier moment in my life.

As I stood there, with my arm in the fissure, with the blood surging into my head, and all my muscles straining with the effort to keep my position, I knew nothing more than that I felt the heart of the woman I loved beating against my own, her warm young cheek touching my cold one in the embrace of love and death.

Then consciousness of her position rushed upon me again.

"No, no!" I cried. "You must not die. Go live, my darling—live until it comes your time to meet me in the other world, where I shall be before you. Go, and believe no man ever met death so gloriously as I shall."

"We go out together, or we die together," she said, firmly. "Speak of it no more."

Then a solemn silence fell upon us. The men must have nearly all escaped, as I could tell by their distant shouts.

The earth was breaking away around my arm, and the water was already nearly two feet deep upon the floor of the chamber. I could hear the subterranean stream roaring more threateningly in the bowels of the mine. Another pound of pressure, and I should be flung down and the chamber would fill.

Then came a great desire for life. How could I bear to have my new-found joy so suddenly smothered in the ground? *Was* there not yet one hope?

The sounds of the escaping men had ceased. If we could get the cage down once more in time, we might perhaps escape, after all. I explained my hope to Eve.

"Run," said I, "ring for the cage. I will hold on here a moment more. If we can reach it, we are safe."

Eve looked at me sharply an instant—she feared I meant to deceive her into escaping while I remained behind; but she divined my intention.

With a quick movement she seized the light, lifted her skirts, and ran through the water out of the chamber. The next thirty seconds seemed like hours.

I desperately held my own against the water, while every vein seemed bursting with the strain. I heard the bell ring for the cage, heard it slowly descend; then the water overcame me.

I was flung down as by a giant's hand. There was a roar and rush as of a Niagara, and, with a whirl of lights and faces, a chaos of confusion and terror, I knew no more.

When I slowly struggled back to life, after many days, I was far from the Maberly Mine. I was no longer John Wallace, gang master, but Wallace Grover, gentleman. I was in my father's house.

My old servants were around me, and, like a fairy who had worked a wonderful transformation, sweet Eve Guion was the dominant angel of the scene.

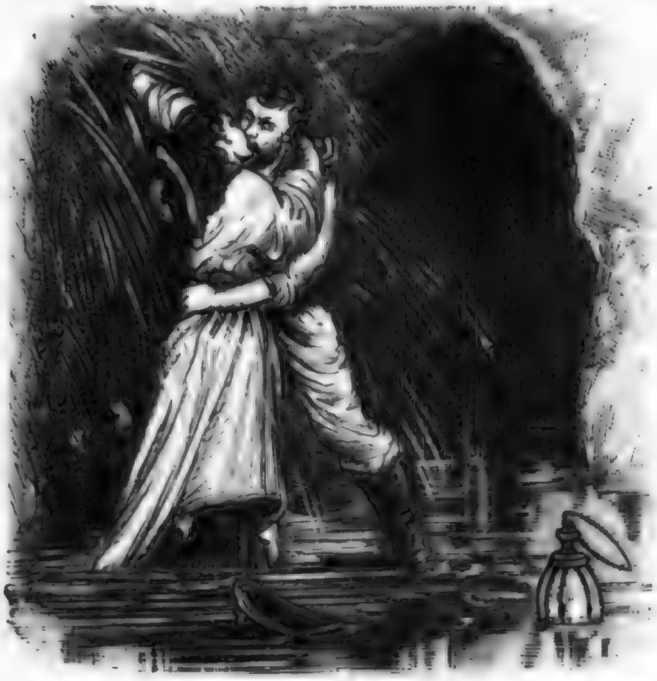
My affairs had been settled with my creditors very much more to my benefit than I had imagined could be possible. My ancestral home and a modest competence were still left to me.

This, too, was the work of Eve Guion, whose love and faith in me had never faltered in all my wretchedness and exile, and whose strong will had drawn comfort and happiness for me out of the depths of sorrow.

If Mr. Guion objected to the turn affairs were taking, he had the sense to offer no fruitless opposition to his daughter's inclination; and I will do him the justice to say that with a very good grace he performed his part at our wedding.

All mankind acknowledge themselves able and sufficient to do many things which actually they never do.

XUM



IN THE MABERLY MINE.—"BEFORE I COULD COMPREHEND HER WORDS, SHE CAME TO MY SIDE, AND, PUTTING HER ARMS AROUND MY NECK, DREW MY CHEEK DOWN UPON HERS."

A DELICATE QUESTION.

IN some districts of Japan the natives have a remarkable custom in connection with window-gardening. In houses wherein reside one or more daughters of a marriageable age, an empty flower-pot, of an ornamental character, is encircled by a ring, and suspended from the window or veranda by three light chains. The Juliets of Japan are, of course, attractive, and their Romeos as anxious as those of other lands. But, instead of serenades by moonlight and other delicate ways of making an impression, it is etiquette for the Japanese lover to approach the dwelling of his lady bearing some choice plant in his hand, which he boldly, but, let us hope, reverently, proceeds to plant in the empty vase. This takes place at a time when he is fully assured that both mother and daughter are at home, neither of whom, of course, is at all conscious that the young man is taking such a liberty with the flower-pot outside their window. It is believed that a young lover so engaged has never been seen by his lady or by her mamma in this act of sacrilege. This act of placing a pretty plant in the empty flower-pot is equivalent to a formal proposal to the young lady who dwells within, and this Eastern fashion is a most delicate and harmless way of proposing to a lady. The youthful gardener, having settled his plant to his mind, retires, and the lady is free to act as she pleases. If he is the right man, she takes every care of his gift, waters it and tends it carefully with her own hands, that all the world may see the donor is accepted as a suitor. But, if he is not a favorite, or if stern parents object, the poor plant is torn from the vase, and the next morning lies, limp and withered, on the veranda or on the path below.

ABSENCE OF MIND.

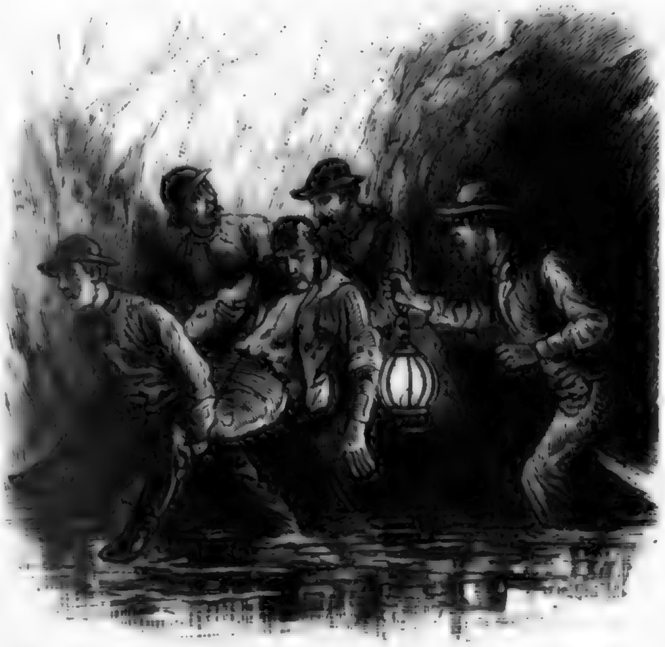
IN his *Voyage Autour de ma Chambre,* De Maistre discusses the very curious phenomenon of the independence of the mind and the body. He tells us how, in a fit of absent-mindedness, he often drew on his stockings wrong side out, and had to be reminded by his invaluable servant Joannetti of his mistake. Many readers will call to mind experiences of their own of a similar nature. It seems quite common to put one's watch key to one's ear to ascertain if it is going; and many people are in the habit of winding their watches, and three minutes after, pausing to wonder whether they have done so or not.

Who has not heard of the philosopher who boiled his watch while he calmly held the egg in his hand to note the time! Or of the equally erudite man of science who, having peeled the apple, threw the apple itself over a cliff, and then discovered that the rind alone remained.

Another individual had the habit—not such a very uncommon one—of forgetting his own name at awkward moments. One day he presented himself for letters at the post-office, when, much to his disgust, he could not think of his name. He turned sadly homeward, racking his brains in the vain endeavor to discover who he was. Suddenly a friend accosted him: "How are you, Mr. Brown?" "Brown, Brown, I have it!" cried the absent-minded one; and leaving his astonished friend, he rushed back to the post-office to get his letters.

Sometimes absence of mind produces very ludicrous effects. Harry Lorrequer's appearance on parade in the character of *Othello* is well known. A somewhat similar occurrence in real life happened not long ago. A student on leaving his rooms one afternoon to take a stroll in the fashionable street in a university town, suddenly remembered that his fire needed coals, and returned to replenish it. On issuing from his lodgings the second time, he was surprised to see people with an amused smile looking at him. Presently, some ragamuffins at a street corner began to make audible remarks. On looking down, he discovered, to his horror, that he was serenely carrying the fire-tongs in place of his umbrella!

One day an English savant wrote two letters: one to a business house in London, the other to a friend in Paris. In stamping them at the post-office, he placed the penny stamp on the letter for Paris, and the other on the business letter. Remarking to the post-office clerk that he would correct the error, he changed the addresses! It was not until after he had posted the letters that he understood why the clerk had not been more impressed with his brilliant idea.



IN THE MABERLY MINE.—"WITH A WHIRL OF LIGHTS AND FACES I KNEW NO MORE."—SEE PAGE 109.

A LEGACY OF TEARS.

"PERHAPS I ought to wear them. I'm not sure."

"Oh, a duty!"

"Well, but you know, Eva, dear, they have always been worn by the brides in our family—ever since they appeared among us. They formed a portion of the bridal costume, in fact; the same as the wreath or vail, and it would be contrary to all family tradition were the bride not to wear them."

"Oh, dear me! I believe I should be tempted to break through such an of-course custom, just for once!" replied Evelynne Mathews, with the pale shadow of disdain on her prim lips.

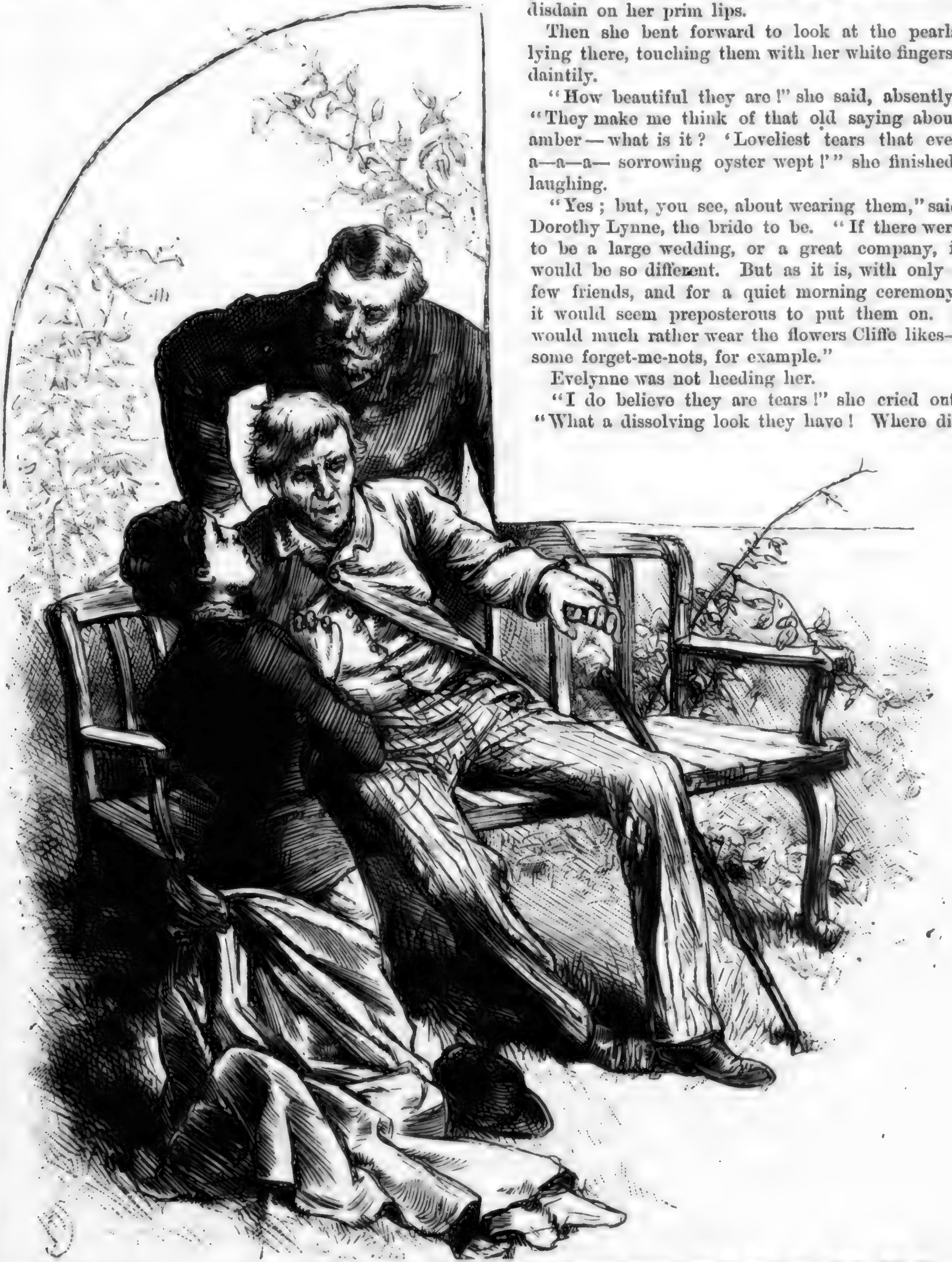
Then she bent forward to look at the pearls lying there, touching them with her white fingers, daintily.

"How beautiful they are!" she said, absently. "They make me think of that old saying about amber — what is it? 'Loveliest tears that ever a—a—a— sorrowing oyster wept!'" she finished, laughing.

"Yes; but, you see, about wearing them," said Dorothy Lynne, the bride to be. "If there were to be a large wedding, or a great company, it would be so different. But as it is, with only a few friends, and for a quiet morning ceremony, it would seem preposterous to put them on. I would much rather wear the flowers Cliffe likes—some forget-me-nots, for example."

Evelynne was not heeding her.

"I do believe they are tears!" she cried out. "What a dissolving look they have! Where did



A LEGACY OF TEARS.—"THEY FLEW TO THE GARDEN AND FOUND THE WANDERER THERE. OLD?—YES, AND DYING. BUT IN HIS LARGE, PATHETIC EYES WAS A GREAT CONTENT. DOROTHY FELL ON HER KNEES BEFORE HIM."

you say you got them, Dolly? Oh, here comes Aunt Agnes! She shall tell us. Did you ever notice, Dolly, how she has the air of a whole family's pride, bound up in one volume?"

Dolly laughed. It was, indeed, true that the tall woman who now entered the room quietly had the noble look of a "grand dame" whose pride was above soil.

To her Evelynne Mathews turned.

"Oh, dear Miss Lynne, you are just the one we wanted to see! Just look at these pearls—and, you know, Dorothy is not going to wear them. She thinks flowers will be more appropriate."

While she was speaking, two men—both young; one large, handsome, dark; the other slender and fair, but with mystical, dreamy eyes that relieved the effeminate cast of his features—came up, and, entering the garden-door unobserved, stood silent but not uninterested listeners to this important theme.

Meanwhile an angry flush had spread over Miss Agnes Lynne's pale, high-bred face.

"Not wear the pearls!" she exclaimed, with energy. "Such a thing is not to be thought of for a moment. It would be the first time they were omitted from the bride's toilet since we have had them."

She turned, and saw the two gentlemen behind her. Then she addressed herself at once to the dark and handsome one, as if she were sure of an ally in him:

"Dorothy talks of not wearing the pearls, Cliffe. What folly! If you take a bride from the House of Lynne, you must take her with the Bride's Legacy. She will wear the pearls."

Cliffe laughed. Evidently he attached no great importance to the matter, but, with a deferential air, he listened to Miss Lynne.

"I am sure Dorothy will do what you wish in this affair," he answered, gently. "For me, it does not matter whether I take her with the jewels, or only with a green vine in her hair, since she becomes mine—mine only!"

He added those last two words in a fainter tone. As for her, that beautiful, bright-haired bride, she turned to this dark, passionate lover of hers, and if she were to wear the pearls when she went to him, at least the forget-me-nots of which she had been speaking were in her eyes now. It would take long years for *those* to fade.

The other man stood watching them, with something of sadness in his smile.

"Well, that is settled, then," said Aunt Agnes. "And I hope you will not again attempt to persuade Dolly not to wear them," she added, turning to Evelynne, severely.

"I—I persuade her?" exclaimed Miss Evelynne, with an injured look. "Why, I never once thought of it. I think a girl would be a simpleton, since she had such things, not to wear them. And I—I told her so," she added, heroically.

Dorothy laughed—the sweetest laugh.

"Poor pearls! But maybe just such a legacy will come to you, some time, as it did to our family," she said, jestingly.

She did not notice Aunt Agnes's angry frown.

"A legacy? But how did it come?" cried Evelynne, eagerly. "You said something once before, that they *appeared*—what is it all about?"

"Oh, some call them the Bride's Tears. I believe they are considered rather unfortunate," said Dolly—poor, pretty Dolly—gayly. "Sometimes they are bright and clear—that is for happiness; sometimes they are clouded and rainy—that is for tears. We will go up into the gallery, and look at the picture of the first bride who was known to wear them, if you like."

Evelynne Mathews shivered. Some one said, long after, that a chill wind seemed to blow past, curdling the very air about them with a steely frost.

"What a bleak January and February sort of story! I declare, you have given me an ague. It is for all the world like that passage in Keats—the one in 'Saint Agnes's Eve,' or 'The Eve of Saint Agnes'—which is it?"

"'The owl, for all his feathers, was a-cold,' perhaps you mean," suggested Aunt Agnes, who had tried to keep awake while the young people read poetry of an evening, and who now dimly remembered imperfect passages, as one sees broken things in dreams.

"Oh, no, not that! But these pearls—can't you imagine the aged crone, the nurse? She has been wronged by some ancient member of the Lynne family, therefore she bequeaths them, with a curse, these pearls, which are the tears she has shed; and can't you imagine how, whenever a new bride puts them on,

"'Feebly she laugheth in the languid moon'!"

She turned to the sad-faced man who was standing beside her, his brows drawn down in an anxious frown.

"Oh, Philip, you must make a sketch of it! It is just in your line; you would do it capitally."

But Philip Harrison did not, in answering, smile at all. One would have said his beautiful, womanly eyes were filled with tears.

"I would rather Miss Dorothy did not wear the pearls at all," was his grave answer.

Miss Agnes Lynne at this stirred angrily.

"That is enough. I think that quite enough has been said about it. Dorothy will wear the pearls!" she exclaimed, haughtily.

Then she took up the old carved cedar-box in which the pearls were lying, and, crossing the room somewhat hastily, deposited it in an old oaken closet that was built into the wall. She shut the door excitedly. Perhaps she did not quite realize what she was doing.

At this an awkward silence fell upon the little group. Evelynne bit her lip, half-vexed, half-amused; then a happy thought struck her.

"Weren't you going up to look at that portrait of the bride in the gallery?" she asked, turning to Dorothy.

So with one accord, with great relief, they all moved away, leaving the pretty, cedar-paneled parlor with only the echo of their light and jesting voices stirring softly in it. Evelynne thought of it many a time after—the careless talk, the careless time; the strong and proud young bride and bridegroom; Aunt Agnes's angry frown, and Philip Harrison's sensitive, sad eyes.

The low, red sun-gleams seemed to follow them up the stairs. They streamed in fitful lines of color through the long slits of windows cut in the rambling old house.

"I hope you do not mind what Aunt Agnes said—we had worried her, you know," explained Evelynne, rather anxiously, to Philip, who was with her.

"No—oh, no! I do not think of that," was his ready answer; indeed he seemed to have quite forgotten that little episode.

He was silent a moment; then he glanced at the bright figure of Dolly Lynne, standing in the red glow of sunlight on the landing above them."

"I wish she would not wear the pearls," he said, in his low, clear voice. "Could you not persuade her, just for to-morrow?"

"Do you mind it so much?" Evelynne stared at him in surprise. "Why, I would not mention the subject again for worlds! Think of Aunt Agnes's anger, too, if I did. She would never forgive me."

"Would that matter?" answered Philip, wearily. "Such a little thing as her anger against Dorothy's whole life's happiness!"

But he said no more about the pearls. He let the subject drop there, to Evelynne's intense relief. She could not understand why he should be so much in earnest about it while Cliffe did not mind; but she had long mentally accused Philip of nourishing an unspoken passion for sweet Dorothy Lynne.

Once in the gallery, they, with one accord, clustered before that famous portrait of the beautiful bride who had been taken from the House of Lynne in the far, fair time of old.

Surely the light was not so clear now! This bride was lovely as a bride should ever be — her eyes were wide and clear; her hair waved high and smooth; the lace, even, on her arms was firm and frost-like — but, surely, she wore no pearls!

They looked at one another, puzzled and half-afraid.

"I thought you said she wore the pearls, Dolly?" at length said Evelynne, doubtfully.

"Yes, they have always shown so plainly; but maybe the light is so dim, we can't see them perfectly."

"Oh, it is not the light! Everything else shows distinctly—even that lace pattern. She certainly has no pearls on now."

"She could not take them off!" cried Dolly, a little angrily, and then she went to fetch a light.

The others stood silent a moment, waiting.

"This," said Evelynne, glancing about uncertainly, to ascertain how far the sympathies of her audience went with her, "reminds me of the finishing and more ghostly part of the legend. I have heard old Nannie, in the kitchen, say—and she is much interested to know if the new bride is going to wear the pearls—she avers it is a fact that when the legacy is passed on to a fresh victim, the likeness of them disappears for a time from the portrait hanging here."

"Nonsense!" cried out Cliffe, impatiently.

But he seems uneasy, all the same.

"Well, it is a mystery," says Evelynne, drawing a long breath.

"There is always a mystery about pearls," Cliffe answers, shortly.

A moment later the door opened, and Dolly came down the long, dusky length of gallery, bearing a lighted taper in her hand.

"I had a fine quarrel with Aunt Agnes," she began, cheerfully. "I don't know when I have seen her so angry. She declares that it is all nonsense, and that we are all fools. I don't believe she will ever forgive you, Eva, and as for Philip——" She paused, and shrugged her shoulders daintily. "Still," she continued, laughing, "I told her that if it was nonsense, no harm could come of it, and she ought not to object, on scientific principles. If the pearls are not there, in the picture——"

"The pearls are not there, in the picture," interrupted Philip, curtly. "It is plain enough to see."

Dorothy turned pale; but now Cliffe, coming forward, took the taper from her trembling fingers.

"Do you remember what the time is?" he asked her, with an air of wise rebuke. "This is the night before your wedding-day; and do you think that on such an important occasion I shall permit you to frighten yourself to death investigating an old woman's witch stories?" He took the light from her, and gently set it down. You are not to mention the subject again, on pain of my direst displeasure."

"I only wanted to see——" she began, confusedly.

Cliffe interrupted her.

"You wanted to see—you wanted to see if it is only a trick being played on you; and let me ask you, do you think that is a foolish young woman hanging up there on the wall, that she should part with her jewels on any such frivolous pretext? What is Philip doing now?"

He was watching her face. The terrified light faded out of the forget-me-not eyes, the color came back to the round cheeks.

They crossed over to where Philip was standing.

"I never saw such a fellow for mooning about in old houses! If he were to enter the barest old rookery ever perched on a mountain-top, he would, in half an hour, discover some miracle of old ivory carving, or a bit of wonderful stamped leather of the time of Louis XII."

Dorothy flushed faintly.

"These things belong to Aunt Agnes," she said, gently. "She prizes them greatly—most of all because they are heirlooms she can leave to me." She took up a hand-mirror out of a drawer—the room seemed to be a sort of repository for *bric-à-brac* of all sorts. "This was painted by Monnyer. Some say that it belonged to Arabella Stuart, and was brought over in the old Plymouth days. Look at that lovely wreath of violets painted on it. I must show it to Philip." Then she added, softly: "I am so glad you like Philip, dear. You — we — must always be kind to him. I believe he would die if he thought he could not serve me."

"Yes," said Cliffe, gravely. He was scarcely heeding her. Then, seeing her hurt look, he added, hastily: "Hush, dear! you must not mind. I was only thinking that the best service we could render him would be to make him think of himself. Don't you see he has got just that sort of self-sacrificing spirit that would lead him to wander off and die, out of some mistaken sense of duty, alone and unknown, thinking he was serving you in some great way, and leaving only

"'A lean 'P. H'—er—engraven on his tomb,'"

he added, laughing, thinking that perhaps he was making too serious a matter of it.

The forget-me-not eyes brightened.

"Oh, that is not the line at all! You are worse than Aunt Agnes at quoting poetry."

They drew near Philip. He was standing in much excitement before a lovely piece of old oak carving let into the wall.

"What is it?" he exclaimed. "Why, it is wonderful! How came it here, and for what purpose?"

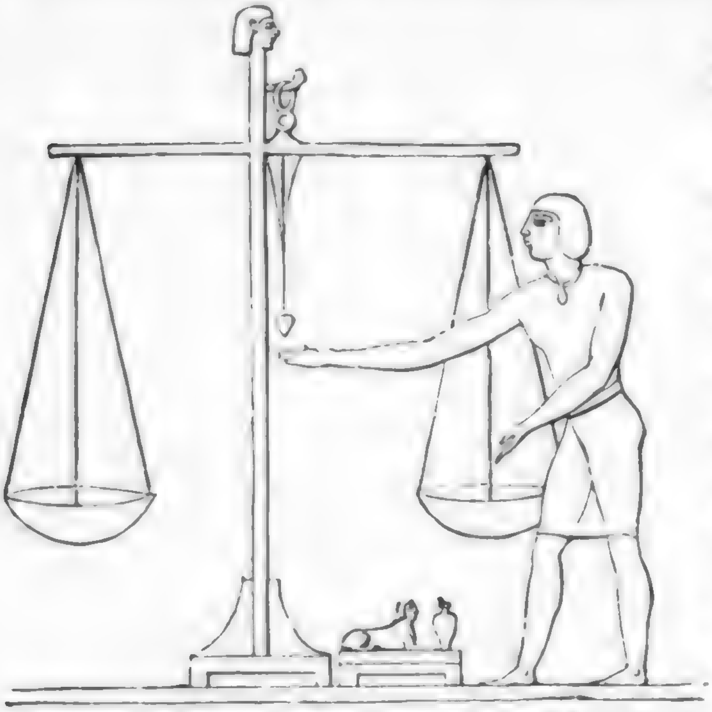
Dorothy peeped over his shoulder.

"Oh, that! That, too, is a mystery. The workmen discovered it about a year ago while they were making some repairs here. It was concealed by a thin laying of cedar panels on the outside."

"The design is Greek," observed Philip, critically. He looked closer. "It seems to represent the Shepherds discovering the Head of Orpheus. Then he ran his slender fingers over the rich and heavy carving. "Secret springs have many times been hidden in such work as this," he mutters, half to himself. "I wonder what it is here for?"

"Hark!" exclaimed Dolly, starting back. "There is Aunt Agnes's tea-bell. We must go."

They sauntered off; Philip, only, lingered behind.



WEIGHING-MACHINERY.—FIG. 1—ANCIENT EGYPTIAN SCALE.

"Please make my excuses," he said, gently, to Dorothy. "I will come soon."

The others laughed.

"He is afraid of Miss Lynne's anger!" cried Evelynne, merrily, looking back at him; and it was the last time that, in this world, she ever saw Philip Harrison.

That night the time-worn, weather-beaten house seemed to sink easily in the prolonged, exhausted slumber of old age. The bride, with the forget-me-not eyes, slept, dreaming of the happiness the morrow would bring her; and the strong young bridegroom, in his passionate and tender dreams, whispered to his happy heart:

"Be worthy of her! Oh, be worthy of her!"

Philip Harrison stood in the garden-window, looking out across the whispering light and gloom.

"Farewell, farewell!" he sighed. "It is not so hard to say farewell when one takes into the darkness such memories as I take." He pulled a white rose, and kissed it, and wept hot tears on its sweet, soft bloom. "Oh, my heart!" he said, at last, "I leave you with her. Farewell, thou, too!"

And so, in the sweet morning glow, when Dorothy Lynne left her chamber, she saw a white rose lying outside on the floor; and if in its fading heart it carried a message and a farewell, she could not know.

Thus it followed that on her bridal morning there fell a shadow, dense and dark, for Philip Harrison had gone, and left no note or good-by behind him—he had gone, none knew why, or whither.

The pearls, too, had disappeared. No trace of them could be found. The box containing them had been secretly removed in the night, and they never again were seen there.

Only one inference could reasonably be drawn; and even Dolly had not enough influence with Aunt Agnes to keep her silent. She advertised the pearls far and near, and if she did not advertise Philip, too, she told the story without reserve, making it distinct and clear.

It was well for Philip Harrison he did not then come back to know of the blight that had fallen on his name.

As for sweet Dolly Lynne, she wore the white flowers of the garden in her hair and on her breast—maybe they brought her a blessing.

The years went by on wings of down; the tender mother of lovely children, the happy wife of a proud and rising, always honored, man—her cup of joy was full.

She, only, remembered Philip tenderly.

"Some time he will come back and explain it all," she said.

But Cliffe was silent. What could the lost man explain? He would not judge, for any clear judgment would seem to go so terribly against the man who had once been his friend.

Yet, be sure of this—the footsteps that follow on the doom of any mortal thing, though slow, never arrive too late.

Cliffe and his family were one Summer week back in the old Lynne House beside the sea. It was late one afternoon that the youngest of the girls came running to her mother with a sealed package in her hand.

A man, feeble, dust-brown, travel-stained, had met her in the garden-path and desired her to give those papers to her mother. He was worn in look. Oh, yes, and gray-haired. He seemed ill, or dying, maybe, he was so very white. The child was confused.

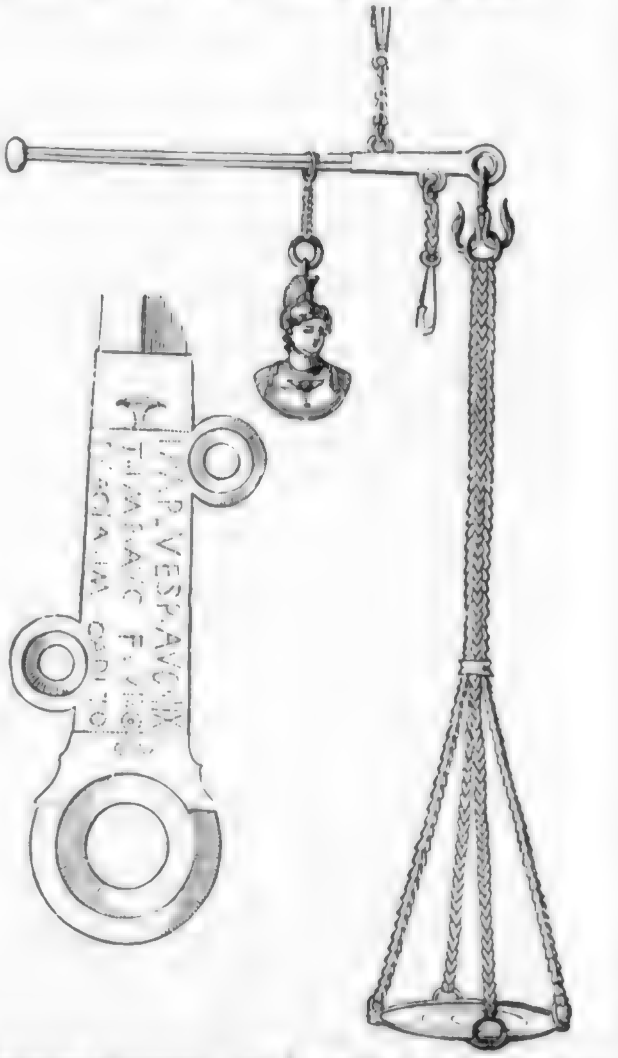
Dorothy Wycliffe broke the seal. She read, and then, with wide, wild eyes, caught up another paper, and read that, too.

"Oh, child, where is he?" she cried, at last. "Oh, Cliffe, come—come with me! It is Philip!"

They flew to the garden, and found the wanderer there. Old?—yes, and dying. White and worn and travel-stained; but in his large, pathetic eyes was a great content.

Dorothy fell on her knees before him.

"Philip, Philip! Oh, why did you do this?"



WEIGHING-MACHINERY.—FIG. 2—ANCIENT ROMAN STEELYARD.

He rested that white head on his arm.

"You have been happy?" he whispered. "Tell me that you have been happy."

"Happy! Oh, yes, Philip—none happier! But why did you do it? I—I cannot bear it!"

She could not bring herself, at that hour, to say to him, "I should have been as happy without this sacrifice."

Such words would have been a sacrilege in view of that martyred life, that white and consecrated soul.

Philip stretched out his hand to Cliffe, who bent over him. "Dear friend!"

Then the drooping head fell forward.

They laid him tenderly on the leafy sod; the white roses and the sweet-brier boughs waved above him. He spoke once more:

"You will find the pearls—*there!*"

They buried Philip without any thought of them, making his grave in the fairest garden-spot, and the roses that he had loved in life were all about him.

They found the fatal jewels in the little recess behind the carving, whose secret spring Philip had discovered. The box was there, as he had left it, but the papers he had found within, bearing on the old legend, they at once destroyed.

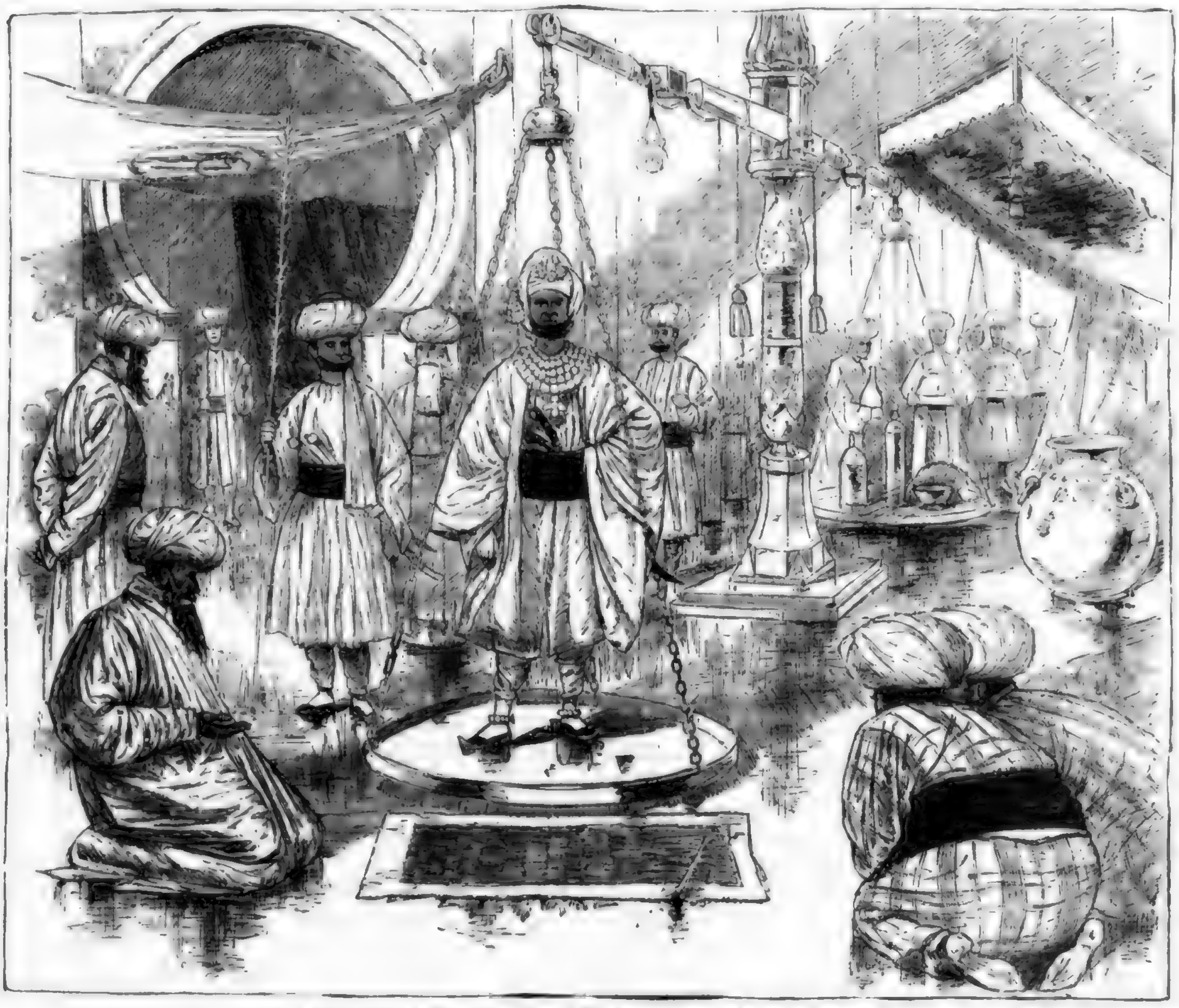
It might have been a legend; but the story in the main part was true to the letter. A woman who had been wronged in those far-away, dusty, past years, bestowed her necklace of pearls on a young bride, and then wrote down her curse, and sealed it within the wall.

"These are the tears I have shed over my fall," she wrote, "and every bride of the House of Lynne shall, in her turn, weep them. None shall be exempt, except that some one take the burden of the curse and weep them in her place."

The pearls were sold, and with the money they brought, a beautiful monument was built on Philip Harrison's grave.

"The Tenderest, Truest Friend."

was carved on it. Dorothy could not say more. Still, the beauty of that mournful sacrifice, of that tender and gentle life, was not all lost, she hopes—not lost nor wasted. Lost! Is anything beautiful in this world lost or wasted? God grant not, where there is so much to sadden and to chill!



WEIGHING-MACHINERY.—FIG. 3—WEIGHING THE GREAT MOGUL.

WEIGHING - MACHINERY.

By Arthur Vaughan Abbott, C. E.

How much does it weigh?

While this is probably one of the earliest questions asked by mankind, it is one that is repeated a million times daily by all classes and conditions of men, from the astronomer, who with his table of logarithms weighs the solar system as it flies through space, and the chemist who measures the invisible atoms, to the corner grocery man who peddles his wares on a rickety balance with questionable weights. How much does it weigh? Who

XUM

among us, as we carelessly watch the grains of sugar or the berries of coffee slide from the scoop into the scale-pan, think what an intimate relation this simple question bears to almost every affair of life, or consider that its solution has taxed the mightiest brains the world has ever produced, or even wonder with idle curiosity as to any of the mechanical means by which that solution could be accomplished. Curiously, while at the present time there are many ingenious and exceedingly accurate instruments for ascertaining quantity of weight, we are as much in the dark as to what weight really is, as were the earliest nations of antiquity.

Possibly Sir Isaac Newton most nearly approached this great mystery when he announced that every particle of matter in the universe attracted every other particle. But, after all, this is a mere statement of fact, and what this all-pervading mysterious attraction is that binds together the particles in a drop of water, and speeds across interplanetary space in defiance of any and all obstacles, with immeasurable velocity, we know absolutely nothing.

An apple falls to the ground, and all of our weighing machines are merely contrivances for estimating the amount of mutual attraction which exists between the earth and the apple. But what this inscrutable affinity is, which by some philosophers is suspected to contain the promise and potency of all force, we are ignorant. Fortunately for mankind, as it has been found to be omnipresent and its effect directly proportional to the relative masses of matter between which it acts, this wonderful force becomes the only and at the same time a very convenient measure; and, assuming the globe on which we live as a standard, we proceed to compare with it everything else, from the lightest atoms of hydrogen gas, to the enormous mass of the sun itself. And now it is the mechanical devices for making this comparison that we have to consider.

The earliest weighing-machines are of a date so ancient that their origin is entirely lost in the mists of antiquity. It is surmised, however, that the Chaldeans, so wise in all science and art, introduced the balance into Egypt, almost as complete as it is at the present day. Probably the Chaldean astronomers, under whose direction the Egyptians constructed the great pyramid, also taught them to weigh. Certainly, at this early date the *even* balance had been carried to a high degree of perfection. The accompanying illustration (Fig. 1) taken from an Egyptian tomb-painting, shows one of the balances of this period. A beam is suspended from a hook, set in a post, from either end of which depend scale-pans, making a contrivance perfectly recognizable, even to the most uninitiated, as an ordinary even-balance scale. In Biblical history, 1860 B.C., Abraham *weighed out* "400 shekels of silver, current money with the merchant," to Ephron the Hittite as payment for certain real estate purchases. This sale was made in the presence of witnesses, and is said to be the earliest transfer of land on record.

The Romans were well acquainted with the principle of the lever, and made use of this mechanical movement in the construction of a weighing machine, precisely similar, though on a smaller scale, to the modern steelyards and weighmaster's beams. In Fig. 2 is an illustration of this ancient scale. A beam is so hung that the point of suspension is placed close to one end, from which is fastened a pan in which the articles to be weighed may be placed. On the other side of the point of suspension is arranged a sliding weight, generally made to represent one of their numerous deities; who, presiding over the scale, it is supposed, secured a just and perfect weight. The weighing was accomplished by sliding the goddess to and fro on the beam until she balanced the article placed in the pan. In an enlarged representation of the end of the beam, seen in this figure, it will be noticed that the points of suspension are arranged by reaming holes in the end of the beam, so as to leave a sharp edge on the inside; doubtless, for the purpose of reducing friction to a minimum.

Singularly, all weighing-machines have met with more or less disfavor excepting the even balance, which consists of a simple beam suspended in the centre, carrying at either end of its two equal arms a pan, in one of which the substance to be weighed is placed. The desired weight is ascertained by placing in the other pan a sufficient number of known standard weights to bring the apparatus to a balance. This earliest form of scales has always been held in the greatest esteem, probably on account of its simplicity of construction and the ease with which its accuracy can be verified. It was very generally the custom to estimate the value of slaves, especially the more beautiful female portion of that merchandise, by weight, so that they required an even balance large and strong enough to carry a full-grown woman. Such a machine as this, however, can be adapted to comparatively light loads only; and even when built large enough to weigh 300 pounds, becomes exceedingly bulky and cumbersome to manage. In connection with the subject, one of the most curious instances was the weighing of the Great Mogul, a ceremony which took place annually, and is thus described by an old writer: "The Great Mogul begins the festivities of the anniversary with all manner of diversions, which he breaks off to go to the palace of the queen, his mother, if she be yet alive; and having shown his gratitude to her, he causes his grandees to make her magnificent presents. After he has dined, he puts on his finest robes, covers himself with gold and jewels, and being rather loaded than adorned, goes into a vast and superb pavilion, where he is waited on by the principal lords of his court. He here finds the great scales, and the chains which suspend them, both of which are of massive gold adorned with jewels. He places himself in one of the scales, the other being filled with gold, silver, jewels, pieces of stuff, fine linen, pepper, cloves, mace, cinnamon, corn, pulse, and herbs; and an exact register is kept of the difference of his weight every year. If it appears that he has made any considerable acquisition of flesh since he was weighed last there are great rejoicings throughout the whole kingdom. This ceremony has been observed among Eastern potentates from the remotest antiquity, and eminent Biblical critics have expressed their opinion that the usage is alluded to in the handwriting on the wall at Belshazzar's feast: 'Thou art weighed in the balance and found wanting.' This ceremony is followed by the distributing small pieces of money among the poor, and in throwing among the grandees, nuts, pistachios, almonds, and other fruits made of gold; but they are so small, and the gold so thin, that it is said a thousand of them do not weigh above seven or eight pistoles. The festival is concluded with a magnificent supper given to the lords of the court."

To obviate the difficulties inseparable from even-balance scales, rendered more and more oppressive by increasing business communication, much attention was devoted toward the close of the last century to devising weighing-machines of a composite nature involving the principle of the lever, so that any large weight could be easily rolled upon the scale and balanced by moving to and fro a small mass of metal or poise placed on the weighing-beam. The earliest successful inventors of composite scales in this country were the Fairbanks Brothers of St. Johnsbury, Vt.

They were manufacturers of stove castings and other light iron work, and it is asserted that, becoming discontented with the time and labor required to weigh pig-iron on the old-fashioned steelyards, almost precisely similar to the old Roman contrivance, it occured to one of the brothers to arrange four steelyards in such a manner that a platform could be suspended by four rods from the hooks on which the weight is ordinarily hung. The four steelyards were placed so that the ends carrying the sliding weights were attached to a rod extending to a fifth steelyard. By sliding a weight to and fro on this lever, the combined pull of all the steelyards was balanced. A whole cart-load of iron could be driven on the platform and weighed in a few moments. This contrivance worked so well that a demand for the new scale at once arose, and, abandoning their former business, the Fairbanks devoted themselves to scale-manufacture, until they are now the largest and most successful scale company in the world.

Following the lead of the Fairbanks Brothers, several other firms have from time to time entered upon the manufacture of scales, the most notable of these being the Howe, the Buffalo and the Chicago Scale Companies, and Rhelé Bros. of Philadelphia.

With the exception of a few slight modifications in detail, the scales built by all these manufacturers have been constructed on the plan involving the lever and knife-edge principle, that is to say, each scale consists of a combination of levers. These levers are so arranged as to carry a platform supported on their short arms, while the long arms are connected by means of one or more additional levers to a scale-beam. This scale-beam carries a weight or poise arranged to slide to and fro on its long arm. It will thus be readily seen that a very small weight, acting on the long arm of this latter lever, aided by the multiplication of the levers supporting the platform, is enabled to balance a very large weight placed on the platform. In order to make the scale sensitive and accurate, it is necessary to make the bearings of the levers work with the least possible friction. In the ancient scales, and especially in the *even* balance variety, this was accomplished by simply suspending the beam by means of a flexible cord. In the large modern platform scales, where the load to be weighed is perhaps many hundred or many thousand times the weight of the poise used to estimate it, it becomes necessary to take the utmost care to reduce all friction to the smallest possible quantity. To this end the levers are made of iron, and the bearings supporting the platform with its weight, are made of the hardest steel, ground to a sharp edge, and set on a correspondingly hardened plate of steel. Indeed, in the most accurate and delicate scales, where exceeding sensitiveness is required, the knife-edges, as these bearings are called, are made of agate, ground to almost "razor-like" sharpness. Obviously, the accuracy of the scale depends entirely upon the integrity of the knife-edges, for if, even by carelessness or through the natural wear to which any two bodies are subjected that are constantly rubbed together, the knife-edges become flattened and dull, the levers move hard, and the sensitiveness of the scale is lost. When properly constructed and first made, a knife-edge scale can be adjusted to have almost any desired degree of accuracy. But even under the most favorable circumstances extreme sensitiveness is rapidly lost; and as an instrument of precision the knife-edge scale must be regarded, even by its warmest admirers, as open to very serious objections, and must sooner or later give place to contrivances less subject to deterioration.

Perhaps a better idea of scale-construction may be had by reference to the following illustrations, giving a perspective view, and a longitudinal and transverse section of a large scale capable of weighing 200,000 pounds.

This piece of apparatus, while constructed—so far as the weighing mechanism is concerned—in precisely the same manner as an ordinary scale, has some peculiar modifications, to which we shall presently call attention. Fig. 4 is a perspective view of the machine in question, and Figs. 5 and 6 are respectively a longitudinal and transverse section of the machine. From the perspective view, it will be seen that the platform of the machine consists of a solid construction of wrought iron I beams. Turning to the two sections, the beams b' rest on four castings b''. These castings stand on the centre-pivots of the levers *c. c.* The short arm of these levers is supported by the framework of the machine, while the long arms run to the centre, and are attached to the levers *e* and e'. These levers are attached to the lever *f*, which is in turn (see perspective view) attached to the weighing beam. Examine for a moment what occurs when a load is placed upon the platform. The attraction of gravitation acting on the mass of material placed on the platform, is transmitted through this lever system to the scale-beam, and by this combination of multiplying levers a comparatively small weight of ten pounds on the beam is capable of balancing 200,000 pounds on the platform. Of course every time a weight is placed on the platform sufficient to cause the beam to rise, each of the eight levers with their twenty-four knife-edges must move a trifle, and, notwithstanding this quantity is exceedingly small, being only a few thousandths of an inch, the tendency is to constantly wear away and flatten the knife-edges, impairing the sensitiveness and accuracy of the scale.

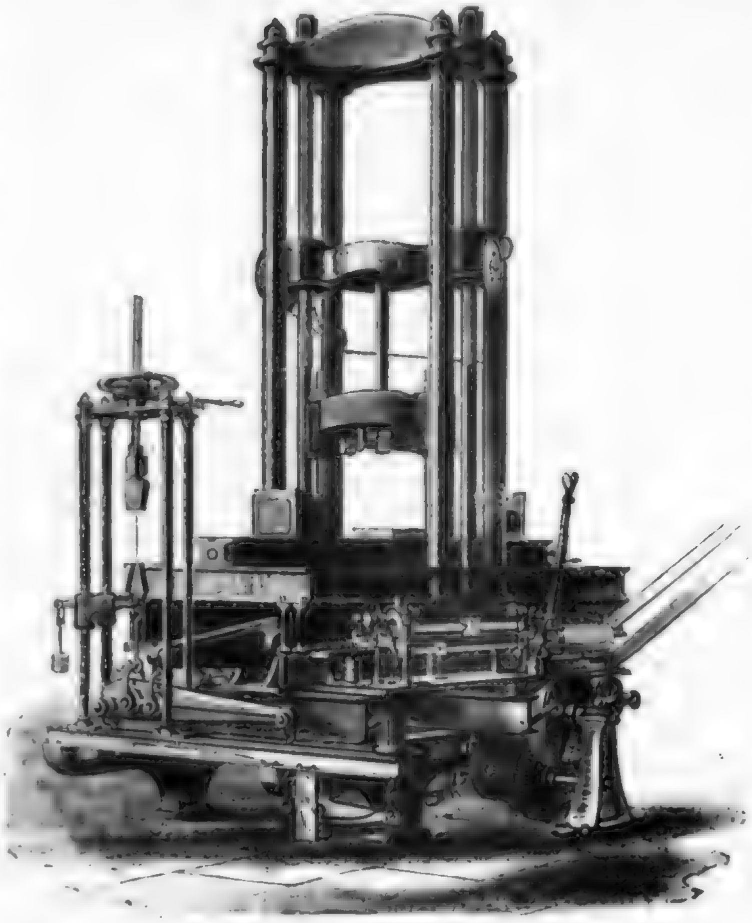
When properly designed, carefully constructed and discreetly used, such a scale will retain a good degree of sensitiveness and accuracy for a long time. When the machine from which the accompanying illustrations were taken was first constructed, it was sensitive enough to show a weight of a single pound placed on the platform. After four years' wear, during which time it has been constantly subjected to loads up to its capacity of 200,000 pounds, the wear on the knife-edges has been sufficient to impair the sensitiveness to the extent of requiring a load of six pounds instead of the former one pound, to cause the beam to move. In comparison, however, with the 200,000 pounds which the machine is capable of weighing, this six pounds is only about one-thirty thousandth part; so that, excepting in cases where extreme accuracy is required, the knife-edge scale, on account of its cheapness of construction, is likely, for a long time to come, to be the principal mechanical contrivance for estimating weight.

The lever principle, as described in the machine just alluded to, is the one involved in the construction of all platform scales, from the smallest portable platform scale on which one steps in a grocery store, to see if they reach average weight, up to the largest railway-track scales capable of weighing, at a single time, an entire train of cars.

Scales, however, may be used for a variety of purposes besides simply that of weighing. In fact, with particular modifications for different circumstances, they may be used for measuring the quantity of almost any

XUM

force. In these days of longest bridges, largest steamships and tallest buildings, public safety demands that constructors in every branch of architecture should be thoroughly acquainted with the character of the materials which they propose to use. In order to ascertain beyond a question that the strength of a particular material is adequate to the strain to which it is to be subjected, it is customary at present for architects and engineers to take samples of the substance to be used and test it, either by pulling it in two or crushing or bending it, thus ascertaining, by direct experiment, its resistance. The machine in the illustrations on this page is one designed to answer these very important questions. In addition to the scale portion of the machine already described, six columns will be noticed standing on the platform, which support a heavy crosshead. Underneath this crosshead may be noticed a second crosshead standing on two screws. By means of appropriate mechanism concealed by the framework, this lower crosshead can be moved up and down. Inasmuch as the screws pass through the platform without touching, the lower crosshead can move up and down without producing any effect on the weighing-beam. If, however, the lower crosshead be connected with the upper crosshead by means of a bar of iron or steel or other material whose strength it is desired to ascertain, so that the downward



WEIGHING-MACHINERY.—FIG. 4.—PERSPECTIVE VIEW OF A KNIFE-EDGE PLATFORM SCALE.

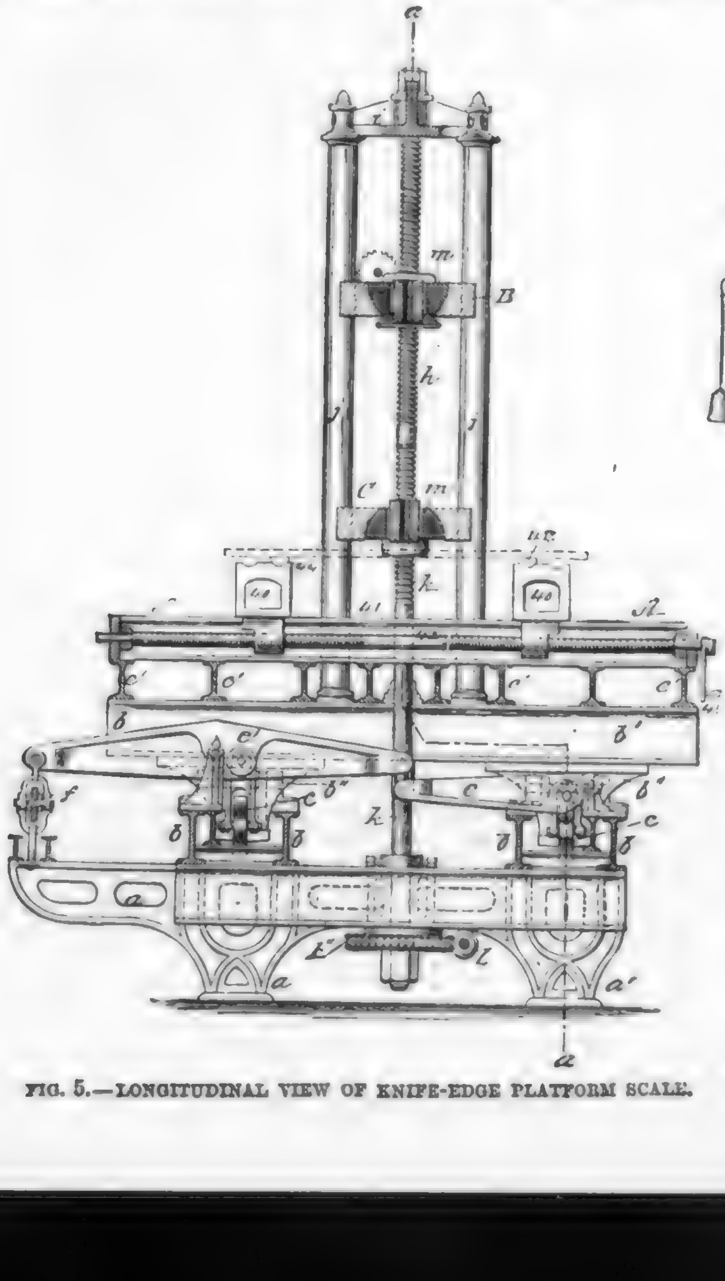


FIG. 5.—LONGITUDINAL VIEW OF KNIFE-EDGE PLATFORM SCALE.

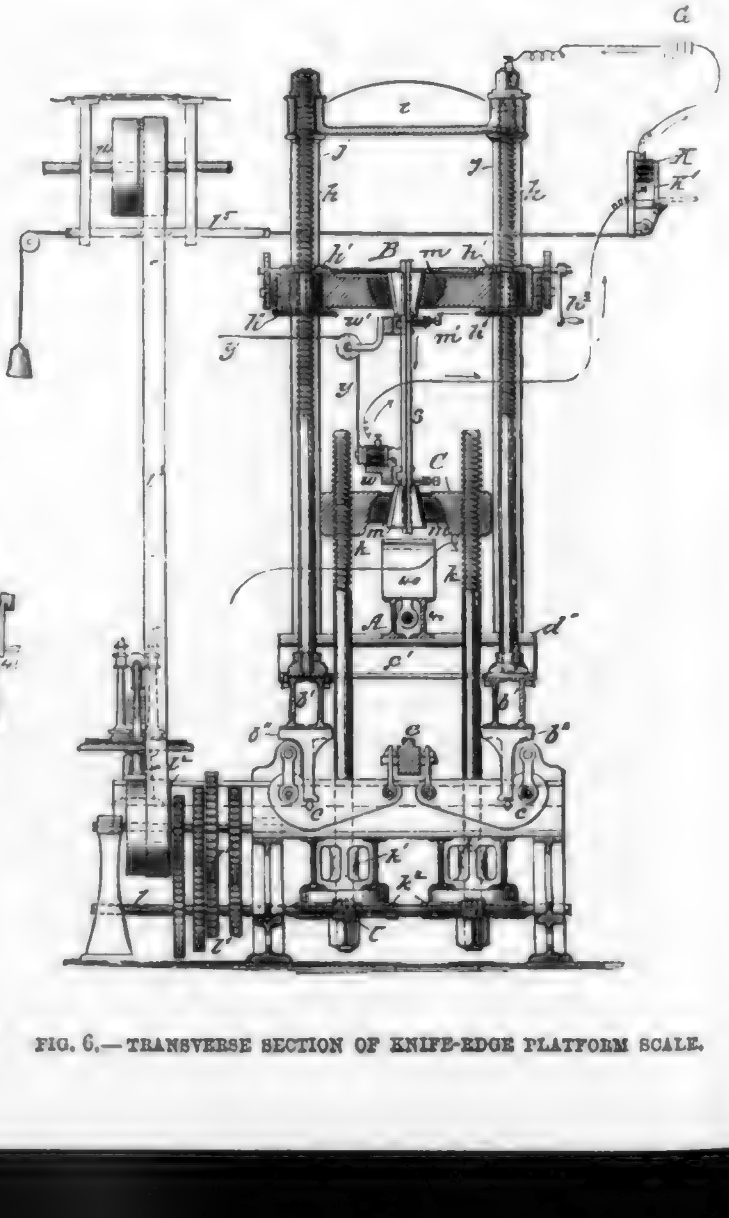


FIG. 6.—TRANSVERSE SECTION OF KNIFE-EDGE PLATFORM SCALE.

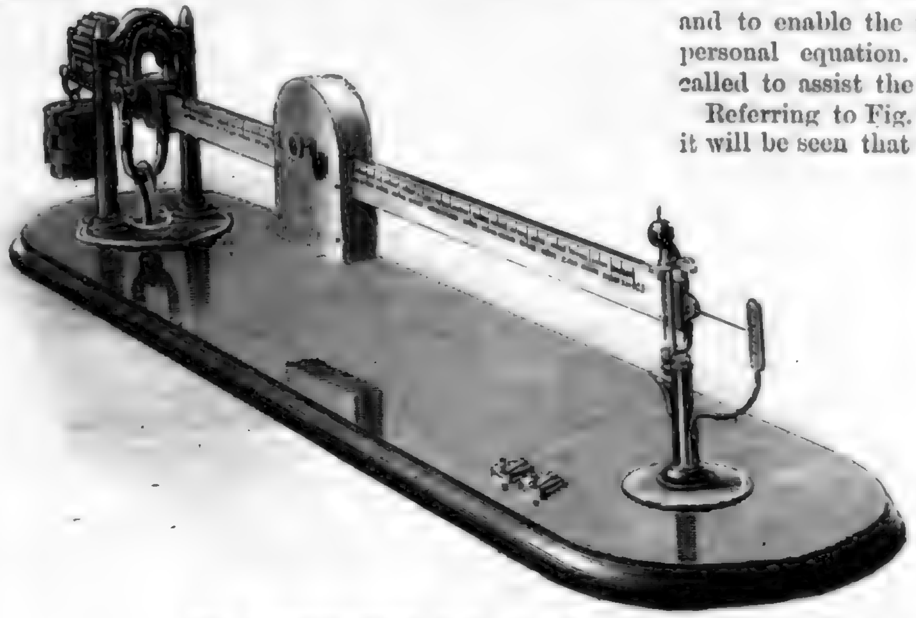


FIG. 7.—WEIGHING-BEAM OF TESTING-MACHINE.

and to enable the results to be obtained free from any personal equation. To this end, electricity has been called to assist the testing-machine.

Referring to Fig. 6 (the cross-section of the machine), it will be seen that the battery *G* is attached to the top of the adjusting screws *h h*. These screws are carefully insulated from the rest of the machine by standing on rubber bases and passing through rubber bushings held in the interior of the top casting, consequently these screws, with their corresponding crosshead, are electrically insulated from the rest of the testing-machine, and being joined to one pole of the battery, form the only means by which the current can flow into the machine itself. As soon as motion of the lower head is resisted by the strength of the test piece, then the amount of force necessary to produce rupture can be measured by the weighing-beam.

By making experiments of this kind upon the materials used in construction, the engineer, architect or contractor cannot only design correctly, but is enabled during the time of construction to assure himself that proper materials are supplied. If, in the United States, it were customary, as it is in some European countries, to require the Government approval of all building materials, we should hear far less of steamboat explosions, broken bridges, and collapsed buildings.

It is very obvious that the work of inspecting materials with reference to their suitability for constructive purposes is one requiring on the part of the investigator a very high degree of knowledge and skill, and a conscientious and faithful discharge of his duties. In designing the testing-machine now under consideration, the endeavor has been to make the machine entirely automatic, in order to relieve the investigator,

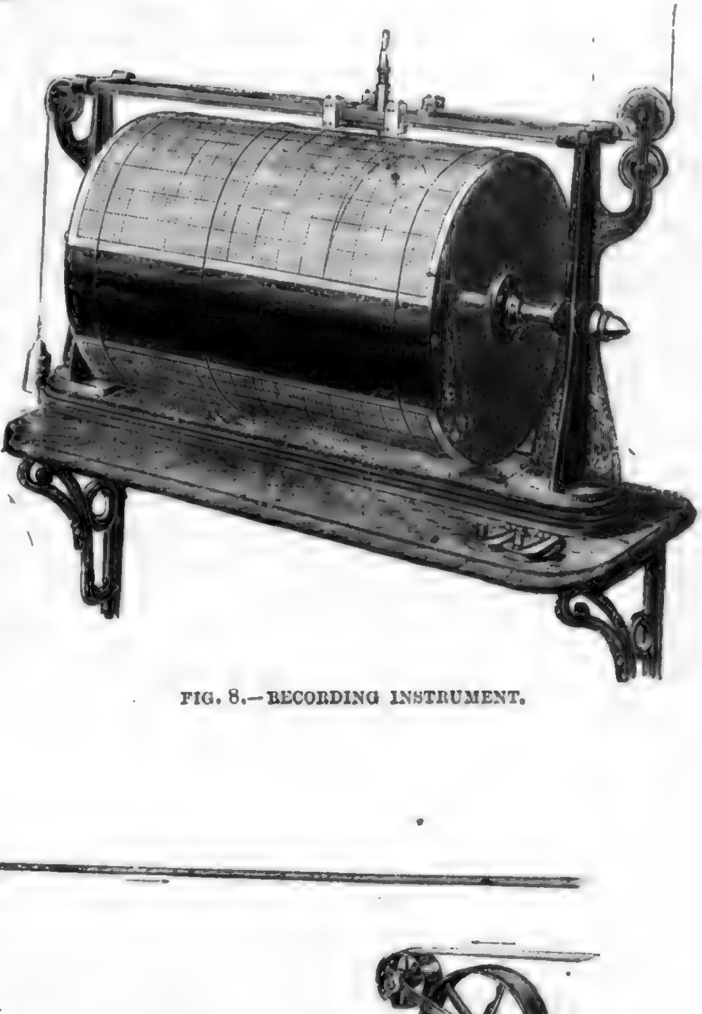


FIG. 8.—RECORDING INSTRUMENT.

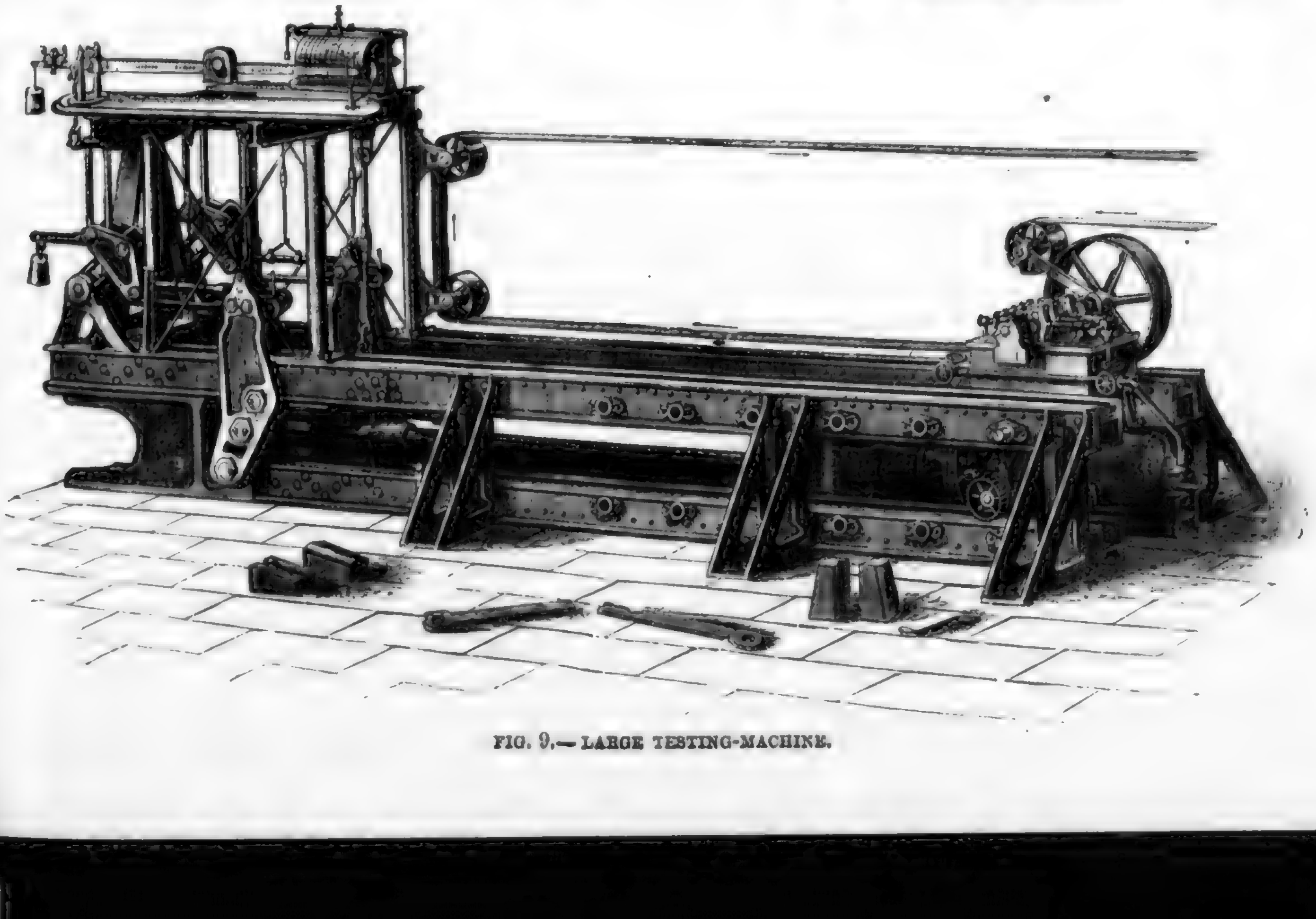


FIG. 9.—LARGE TESTING-MACHINE.

the test-piece is connected with the top crosshead it becomes thereby connected with the battery. On the lower end of the specimen may be seen a small clamp carrying an electro-magnet. One end of the wire of this magnet is in connection with the specimen, while the other end of the wire is joined to a little binding screw on top of the magnet, to which the other pole of the battery is attached, so that the current actuating this magnet flows through the test-piece under examination. A magnetic clutch *K*, for holding the driving belt on the tight pulley, is also included in this part of the battery circuit. As long as the specimen remains intact the current flowing from the battery excites the two magnets and attracts their armatures. When the rupture of the test-piece occurs, the current is at the same instant broken, the magnets are demagnetized, the magnetic clutch *K* is released, the belt slides, by means of a counterpoise weight, to the loose pulley, and the testing-machine stops. In Fig. 7 it will be seen that the weighing beam consists of a single bar suspended on a stand at one end and inclosed in a guard at the other, while on this beam there rests a semicircular brass box, forming the poise. Along the top of the beam, there is cut an exceedingly fine rack and the motion of the poise is obtained by a pinion placed inside of the box and gearing into this rack. From the lower crosshead of the testing-machine, connected with the specimen, the electrical current flows into the butt of the beam. The two mercury cups at the end of the beam are so arranged that when the beam is in the centre neither cup is included in the electrical current, which is consequently broken. If the force on the platform increases, the beam rises and the upper cup is brought into circuit and the current flows. Should the weight in the testing-machine decrease, the beam falls into the lower cup, and the electric circuit is also completed by the drop of the beam. The operation of this piece of apparatus is substantially as follows: Inside of the brass box forming the poise, there is a clockwork motor for driving the poised to and fro on the beam, which is connected with the mercury cup by means of some brass strips placed in the rear of the steel bar forming the beam. These strips are connected with two electro-magnets on the inside of the poise, consequently when the beam either rises or falls, one or the other of the magnets is excited, the corresponding train of clockwork thrown into action and the poise gradually rolls to and fro until a balance is re-established.

Thus it will be seen that, so far as the weighing and the operation of the testing-machine are concerned, the apparatus requires no manipulation, but is perfectly capable of taking care of itself. It now remains to make the machine write its own record of the result of the test. In Fig. 8 is an illustration of a large brass cylinder, containing inside a mechanism similar to that in the poise, and included in the same electrical circuit. From the foregoing description it is seen that as the beam rises and falls under varying loads, the poise rolls to and fro on the beam, keeping it balanced. The mechanism in the cylinder being in the same electrical circuit causes the cylinder to turn backward and forward on its axis in exact correlation with the motion of the poise. Over the cylinder is a little carriage carrying a pencil, and attached to the specimen under examination by means of a flexible steel tape. As the poise rolls to and fro on the beam the cylinder turns backward and forward under the pencil. As the specimen stretches or compresses, the pencil is pulled to and fro over the cylinder. The combination of these two motions causes the pencil to draw on a sheet of paper placed on the cylinder a curved line, which gives a complete history of every moment of the test. Therefore, it is simply necessary to place a specimen in the machine and start the apparatus going, which may then be left to itself. When the specimen breaks, the machine stops, and a complete continuous autographic record of the experiment is found on the cylinder.

In Fig. 9 may be seen an illustration of a testing-machine on a much larger scale, and a different design from the foregoing. It consists of a long horizonal framework of wrought iron channels, upon which travels an hydraulic jack, carrying a three-piston pump, and driven by a belt supported on two idlers at the end of the frame. To accommodate the different lengths of specimens the jack can be run to and fro along the frame at pleasure, and be secured by means of four heavy steel pins which pass directly through each of the four columns composing the frame, between the parts of which run steel lugs connected rigidly to the jack. A system of valves on the jack provides for the admission of fluid on both sides of the piston, so that the jack may be used either in tension or compression, at the pleasure of the operator. At the front end of the testing-machine stands a large bed-plate of cast iron, to which the columns are attached, and which also supports the weighing mechanism for estimating the stresses. This mechanism consists of two heavy levers hung from the framework of I beams, so as to swing directly in front of the crosshead of the jack. On the central pivot of these levers there is hung a second crosshead for the reception of the other end of the test-piece. By means of two horizontal links these levers are attached to two knee-levers for transforming the horizontal stress into a vertical one, and carrying it to a differential lever, which conveys it directly to the beam.

This machine has a capacity of 600,000 pounds in either direction, and is capable of testing specimens between the crossheads up to twelve feet in length. A peculiar feature, however, is that the scale-crosshead has an extremely large opening, and the framework is entirely open directly behind it, so that eye-bars or tension pieces of any length may be easily tested.

About fifteen years ago the United States Government, realizing the importance of a thorough knowledge of the strength of building materials, undertook the construction of a testing-machine of sufficient capacity for making experiments upon the full-sized pieces to be used in building; as, for instance, the shaft of an ocean steamer, a railway rail, or a tie-rod in a bridge. Formerly it had been customary to simply test specimens of building material rather than exact duplicates of the pieces to be used in structures. Many disasters having occurred under circumstances where the test-specimens gave good results, engineers began to perceive the importance of experimenting on a large scale, and the Government testing-machine now located at the Watertown Arsenal was the result. This machine, with its capacity of 1,000,000 pounds, is far larger than any heretofore built. To meet this enormous stress, at the same time obviating the objections to which any system of knife-edge bearings is open, Mr. A. H. Emery, a civil engineer of wide reputation, proposed a very novel and ingenious plan of constructing an absolutely frictionless weighing mechanism. To the Government committee Mr. Emery's plan seemed to possess so much merit that he was awarded the contract for the construction of the Watertown testing-machine, an illustration of which may be seen in Fig. 10, and which is, perhaps, one of the most perfect pieces of mechanism in the world. A complete description of this machine would transcend the limits of present space. In Fig. 11, however, is an illustration of a smaller and less complicated machine embracing the same principles. From this illustration it will be seen that the machine consists of a solid iron framework standing on the floor, from which arise two screws, carrying an hydraulic press to furnish the necessary force for destroying the specimen. The screws previously alluded to simply afford a means of adjusting the jack so as to accommodate different lengths of specimen. To understand the weighing mechanism it is necessary to turn to Fig. 12, which gives a detail view in section of the base of the machine. The essential part of this weighing mechanism is a sort of cast iron box seen near the letter *D*. The testing-machine is so arranged that when the force of the hydraulic press is applied to any specimen (in our illustration the specimen under examination is a wrought iron I beam), this force is transmitted through the specimen to the base of the machine, which permits the force applied to the specimen to be received on the top of the cast iron box *D* previously mentioned. This box of hydraulic support, as it is technically called, essentially consists of a very strong and heavy ring of cast iron covered with a thin, flexible sheet of steel or brass, and filled with a fluid mixture of glycerine and alcohol.

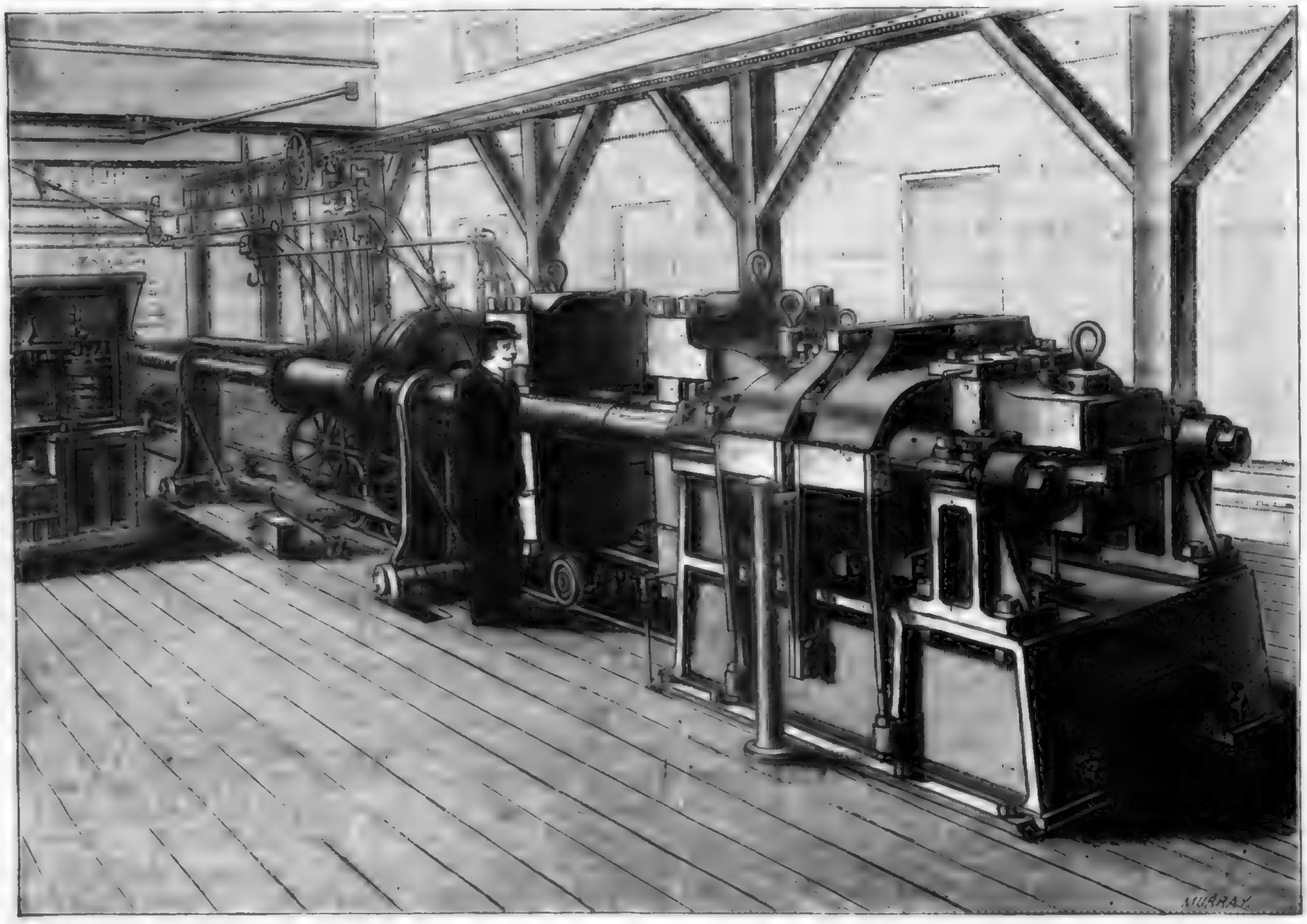
Now it is very evident that any pressure applied to the flexible top will cause a corresponding amount of pressure to be received by the fluid within the box, and, if there should be any outlet, part of the fluid would be forced out of the box. Such an outlet is provided in the heavy tube *f*, which communicates with an hydraulic support precisely similar to the one already described excepting that in the second support the flexible diaphragm is very much smaller than that of the first one, consequently by the laws of hydrostatics the pressure received by the second support is as much less than that received by the first as the area of the second is less than the area of the first. To illustrate: if we suppose that the diaphragm of the support *D* has an area of a thousand square inches, and the load received by it is 100,000 pounds, and the second support in communication with the first by means of the pipe *f* has an area of only one square inch, then the amount received by the second support will be one thousandth of that received by the first support or 100 pounds, a comparatively small quantity and easily measured.

It will thus be seen that Mr. Emery's exceedingly ingenious mechanism for weighing by means of hydraulic supports with flexible diaphragms entirely eliminated all the errors due to friction. It now became necessary to estimate accurately the quantity of pressure received by the second hydraulic support. A common scale-beam placed in connection with the support would have answered the purpose; but here again the objectionable knife-edge would tend to vitiate the accuracy obtained by the hydraulic system. To meet this objection, Mr. Emery contrived a scale-beam, one end of which is seen in Fig. 13, in which the knife-edges suspending the beam are replaced by very thin metallic ribbons, *B B* and B_2 B_2. It is obvious that in a beam suspended by a thin metal plate, the only resistance to movement is that offered by the molecules of the metal; consequently, in the true sense of the word, a scale of this kind is absolutely frictionless, and, by proper adjustment, can be rendered almost indefinitely sensitive. A very good example of a complete Emery scale may be seen in Fig. 14, which represents the system as applied to a gauge for measuring steam or hydraulic pressure. The boiler pressure is received by the cast-iron block *D*, and transmitted through the system of levers *A B C* and *E*, all of which, it will be noticed, are suspended by thin metallic ribbons. The end of the lever *E* is connected with a pointer *S*, moving over a graduated arc. Gauges built on this plan have been made so sensitive that a light pressure of the hand on the heavy cast-iron casing would be indicated by a movement of the needle. While the Emery system leaves little to be desired mechanically, yet the amount of fine and accurate machine-work necessary to manufacture scales on this plan is so great as to render them too expensive for ordinary use, and applicable only where instruments of the greatest precision are required, regardless of expense.

A few years ago, two gentlemen of Cincinnati, Professor Roeder, and Dr. Alfred Springer, while carrying out some chemical experiments, devised a form of balance which bids fair to obviate most of the objections of knife-edge scales, and presents the additional advantage of a tolerably cheap construction. In the Emery scale the beam is suspended by means of a thin ribbon of metal. In the torsion balance, the beam is suspended on a wire tightly stretched horizontally, and, as the beam swings to and fro, the suspending wire is slightly twisted in first one direction and then in the other. The simplest form of torsion balance is a very light beam, supported at its middle point, Fig. 15, which is also its centre of gravity, by a stretched wire, the wire being firmly fastened to the beam. A weight placed at one end of the beam will exactly balance a weight at the other end. The sensitiveness of such a balance depends upon having the torsional resistance of the wire almost infinitely small. This requires a very thin wire, and, as thin wires when stretched horizontally are not strong, the balance can be used only for very small weights. Such a balance was Ritchie's, mentioned in the "Encyclopœdia Britannica," and it was a total failure for large weights. If the wire is made large enough to have an appreciable strength, its torsional resistance prevents the balance being sensitive. This torsional resistance also increases directly as the arc of twisting, up to the limit of elasticity of the wire.

To get rid of the effect of torsional resistance in diminishing the sensitiveness of the balance, was one of the chief ends of Messrs. Roeder and Springer's efforts. They accomplished it in a number of different ways; but the simplest, and the one which will be most generally advisable to adopt, is the placing of the centre of gravity of the beam above its point of support. In knife-edge balances such a placing of the centre of gravity would make the beam top-heavy, or in unstable equilibrium; the centre of gravity would always tend to reach its lowest point and tip the beam. In the torsion balance, however, this top-heaviness acts in the opposite direction to the torsional resistance of the wire, and may be made to entirely neutralize it. We thus have the torsional resistance exerted to keep the beam horizontal, and the high centre of gravity tends to tip it out of the horizontal. The adjustment of the position of the centre of gravity so as to neutralize the torsional resistance is most easily made by having a poise placed immediately above the centre of the torsional wire, and making it adjustable vertically by means of a screw and nut. When the torsional resistance is entirely neutralized, the balance becomes infinitely sensitive, and any smaller degree of sensitiveness that may be desired can be obtained by simply lowering the poise.

What is to be the scale of the future it is impossible to state. Whether it is to be a scale on the Emery system, or on that of the torsion balance, or whether some new



WEIGHING-MACHINERY.—FIG. 10—WATERTOWN TESTING-MACHINE.

invention will arise eclipsing each of these, must be left to the future to decide. But certain it is that, so far as instruments of precision are concerned, the days of knife-edge scales are over. For the coarser commercial transactions the knife-edge scale will doubtless long hold its place. But science, with a constantly increasing desire for accuracy, now demands a weighing-machine which, when weighed in balance of scientific exactness, shall not be found wanting in qualities so essential to scientific research.

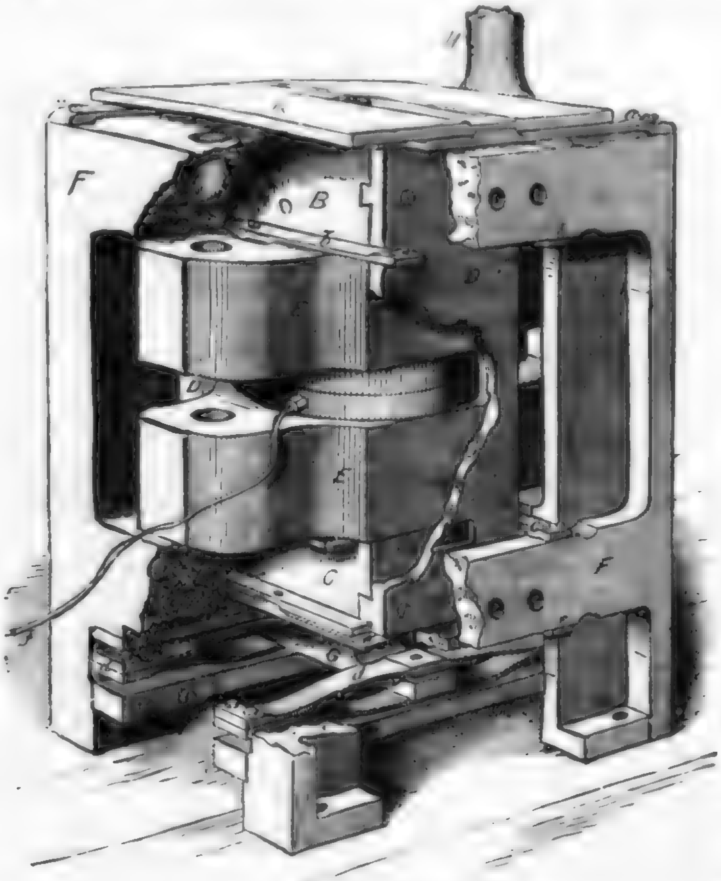


FIG. 12.—BASE OF MACHINE.

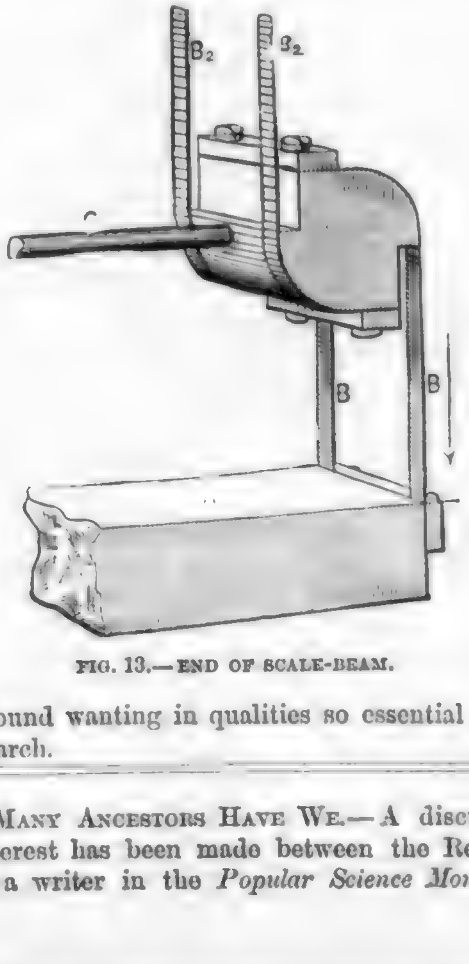


FIG. 13.—END OF SCALE-BEAM.

How Many Ancestors Have We.—A discussion of some interest has been made between the Rev. Henry Kendall, a writer in the *Popular Science Monthly*, and

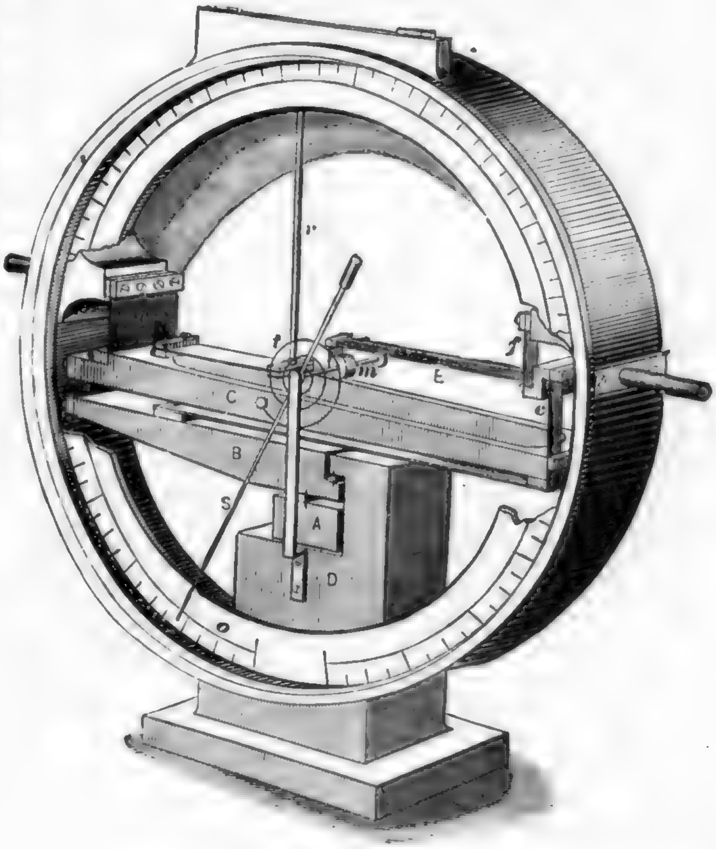
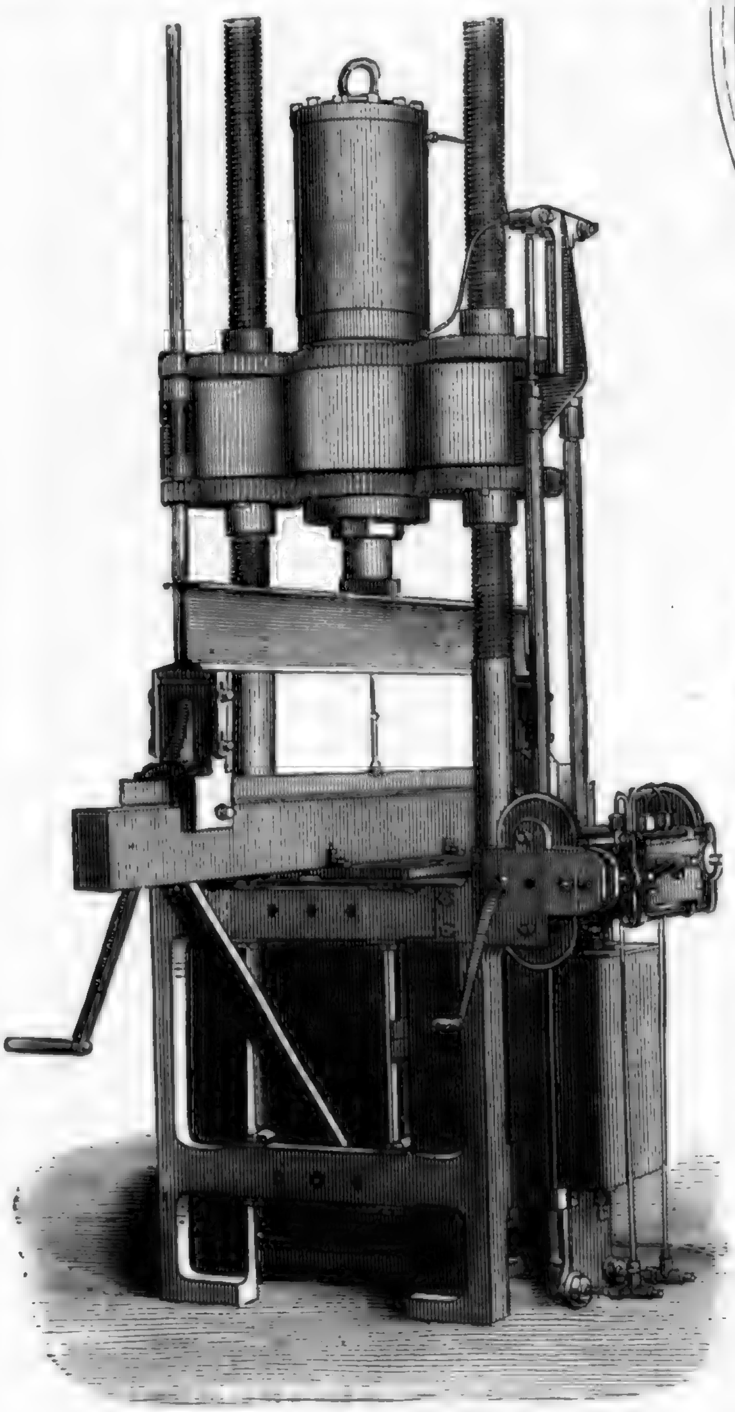


FIG. 14.—EMERY SCALE.



WEIGHING-MACHINERY.—FIG. 9—TESTING-MACHINE.

Professor Angelo Heilprin, of Philadelphia, who prints his criticisms in *The American*, of that city, as to the number of ancestors of a given community of persons now living. "In the first generation," Mr. Kendall truly says, "a man reckons only two ancestors, his father and mother. In the second generation the two are converted into four, since he has two grandfathers and two grandmothers. But each of these four had two parents, and thus in the third generation there are found to be eight ancestors, that is, eight great-grandparents. In the fourth generation the number of ancestors is sixteen; in the fifth, thirty-two; in the sixth, sixty-four; in the seventh, 128. In the tenth it has risen to 1,024; in the twentieth it becomes 1,048,576; in the thirtieth no fewer than 1,073,741,834. To ascend no higher than the twenty-fourth generation we reach the sum of 16,767,216, which is a great deal more than all the inhabitants of Great Britain when that generation was in existence. For, if we reckon a generation at thirty-three years, twenty-four of such will carry us back 792 years, or to A.D. 1093, when William the Conqueror had been sleeping in his grave at Caen only six years, and his son William II., surnamed Rufus, was reigning over the land. At that time the total number of the inhabitants of England could have been little more than two millions, the amount at which it is estimated during the reign of the Conqueror. It was only one-eighth of a nineteenth-century man's ancestors if the normal ratio of progression, as just shown by a simple process of arithmetic, had received no check, and if it had not been bounded by the limits of the population of the country. Since the result of the law of progression, had there been room for its expansion, would have been eight times the actual population, by so much the more is it certain that the lines of every Englishman's ancestry run up to every man and every woman in the reign of William I., from the King and Queen downward, who left descendants in the island, and whose progeny has not died out there." To this Professor Heilprin suggests a cautious adherence. One fallacy in it, he points out, consists in the fact that ten children of the same parents have not ten times these ancestors, but just the same; and another consists in the fact that where two persons of one family marry two of another, their children have the one set of ancestors; another fallacy is that a person's ancestors beyond the third remove are likely to be not all different, but in many cases the same persons. Thus, in the case where

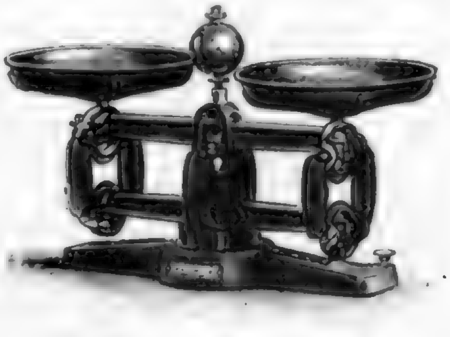


FIG. 15.—TORSION SCALE.

first-cousins marry, though their child has eight great-grandparents, the eight are really but six individuals, two being common to both sides of the lineage. Beyond the third remove, of course, this liability to duplication continually increases, and the same parents will often be found figuring in several places. The repetition of parents will be greater under certain circumstances, and where families of rank or wealth have intermarried greatly within themselves or among a small group, for reasons of state. "In localities where there has been little movement or migration the common ancestorship will be very frequent. So, too, the different classes—in England, for example—have kept to themselves very much. It is true that where there were many "younger sons," some part of the aristocratic families has gradually subsided into middle or common rank, but these transitions are but a part of the case. If we were to classify the population of England, at the time of William I., it would be found that some have now (as Mr. Kendall says), no living progeny; that others are represented by descendants whose lines traced back would reach a great many in that class, but not all, the repetitions in the far generations overcoming the doubling process; and that probably no one person on earth had the whole number for his ancestors. That "the lines of every Englishman's ancestry run up to every man and every woman in the reign of William I. (excluding the children, and those whose progeny has died out), is a monstrous miscalculation."

RECENT PROGRESS IN SCIENCE.

ENGLISH scientific journals contain an account of the scheme of a British inventor by which a lightship, cable station and harbor of refuge can be established in midocean. The principal parts of the invention consist of an eighty-foot square steel cushion with a pyramid top, having a deck and sixty-foot light-tower at its apex, the principal feature of the invention. Four cables from the corners connect at a considerable depth with a single anchor-cable, thus allowing the vessel to swing freely before any wind or current. From the centre of the vessel wires will connect with the various Atlantic cables, so that ship-news can be transmitted. Safety is assured by extreme strength and minute subdivision into water-tight compartments; also by the shape of the deck and sides, from which the heaviest waves will, the inventor claims, be deflected. It is generally conceded that this plan is not beyond possibility of accomplishment. The advantages claimed for it were: First, that shipwrecked sailors or foundering vessels would have a refuge for which to steer; second, that such a lightship would become a place of call for ocean steamers, even though not in distress, and that much ship news could therefore be furnished; third, that invaluable aid would be given to weather-bureau forecasts; fourth, that the expense of cable transmission would be greatly diminished by use of relay apparatus, such as this vessel could contain.

SEVERAL attempts have been made to transplant the lobsters of the Atlantic to the Pacific coast of the United States, but so far the success is imperceptible. Livingston Stone, knowing that lobsters had been carried long distances by rail, and sent to England, made three attempts to introduce living Eastern lobsters to Californian waters, and at the last attempt succeeded, planting apparently healthy examples in San Francisco Bay. Whether the temperature or specific gravity or saltness of the Pacific is at fault, or what is the reason, is not known, but breeding has not followed this transplantation. Many accounts have appeared since of the taking of young lobsters near San Francisco, but these have always proved to belong to a local species distinct from our Eastern one, which never attain a length of more than three or four inches, and were mistaken for the young of the newcomers. Careful observations upon the comparative temperature and density of the waters of the two coasts would be of great advantage in undertaking the transplantation of edible marine forms from one ocean to the other.

ONE of the latest novelties in the way of labor-saving machinery is a shoe-tying machine made by a Baptist clergyman of Palmer, Mass., named Weeks. This machine is described as adapted for tying up or pairing boots, shoes, rubbers, etc., as well as gloves and hosiery, putting strings into tags, etc., and can be operated by steam or hand power. It will tie about six times as fast as by hand, the hole is much smaller than that made by a tying-awl, while the knot is larger in proportion to the string used than when tied by hand, and the articles worked upon are less liable to injury.

SOME interesting discoveries in relation to the distillation of coal-tar were brought out in a late lecture before the Franklin Institute of Philadelphia, by Professor S. P. Sadtler, an abstract of which has been printed. It appears that if bituminous coal be subjected to an intense heat in a closed retort, it resolves itself into three products—the fine carbon or coke, the gaseous vapor for distillation, and the mixture called coal-tar. The possibilities of the former two substances are fairly well understood. It is the coal-tar which presents the most interesting problems to the industrial chemist. What can be made of it? It is to this question that Professor Sadtler addresses himself, combining the results of his own studies with his observation of what has been accomplished in Europe. In America we are behind Europe in the matter of utilizing the residuals of manufacturing processes. Necessity has driven them to make the utmost they can out of every raw material. Professor Sadtler describes five processes in use in Great Britain for the utilization of coal-tar, for the manufacture of substances highly useful in the arts, such as sulphate of ammonia, besides furnishing pure tar for its proper uses. The lecture is amply illustrated with diagrams of apparatus, etc. It is of interest not only to the chemist and the industrialist, but to the political economist, as opening vistas of the utilization of residuals, which may make many things possible and profitable which now are not so. Europe succeeds and America fails in the production of beet-sugar, because we have not learned to avoid the waste of residuals.

IN a paper before the Massachusetts Medical Society, reported in *Science*, Dr. W. N. Bullard has lately given interesting results from his studies of tea-poisoning. He arrives at the important conclusions that the action of tea is cumulative, and is more pronounced on the young and those in a depressed physical condition, although persons otherwise healthy not infrequently show poisonous symptoms; that, as a rule, in the class of people examined by him, chiefly adult women, the average amount needed to cause poisonous symptoms was a little less than five cups daily, and that chronic tea-poisoning is a frequent affection, whose most common symptoms are loss of appetite, dyspepsia, palpitation, headache, vomiting and nausea, combined with nervousness and hysterical and neuralgic affections, frequently accompanied by constipation and pain in the region of the heart.

THE *Mechanical Engineer* explains why, in rooms heated by a stove, it is common to find various temperatures, and a consequent great waste of fuel, in extremely cold weather. "The cause of the variation in the air of the room is not wholly owing to the severity of the weather outside, but to the stove itself, which, by reason of its demand for oxygen to burn the fuel, creates draughts toward itself from all sides, and is actually consuming, or exhausting, its own heat. The waste thus entailed is manifestly enormous, and can be readily checked by supplying air to the fire from a conduit leading directly from the external air, the same, in fact, as cold air is now supplied to furnaces in the cellars. In such a case the hot air in the room would not be drawn into the stove, draughts would be prevented, and the rooms heated more equally and economically."

THERE appeared in this column some months ago an account of the reddening of codfish, which from time to time has greatly annoyed the fishermen and fish-curers at Gloucester, Mass., the headquarters of the codfish trade of the United States. This is a minute alga named *Clathrocystis roseo-persicina*, and associated with it is another parasite called *Sarcina morrhuæ* (Farlow). Since then this peculiar redness, theretofore known only on our coast, has appeared in the Mediterranean and on the Atlantic coast of France. In Algiers sickness was caused by eating the reddened fish, which was found filled with the *Clathrocystis*; but in France no harm followed, though a third parasite (a kind of fungus) was discovered in the fish. The wide distribution of these parasites is interesting.

AN English microscopist has satisfied himself that pear-blight is caused by bacteria, and he finds that sap from an infected tree, when inoculated into a healthy tree, invariably produced blight. The same evil effects follow inoculation by "cultures" carried to the sixth generation of organisms. As a crucial test, the experimenter filtered a bacteric solution, and inoculated two healthy trees side by side, one with the filtered, the other with the unfiltered, solution. The former received no harm, but the latter tree was blighted.

THE frequent failure of mild steel plates and bars has long puzzled engineers to account for. It has recently been studied by a German physicist, C. E. Stromeyer, who attributes the fracture to deterioration, resulting from their being worked when at a "blue heat." Out of twelve samples thus treated, which were tested by him, nine broke at a single blow of the hammer, while the remainder were scarcely less brittle. The moral, of course, is, that the "blue heat" method should be abandoned.

A PROMINENT lead-smelter in Wales was moved by an account of the efficacy of an electric spark in clearing a dusty atmosphere, to try it in purifying the atmosphere of his works, where the fumes of volatilized lead were continually escaping from the flues and poisoning the atmosphere. An experimental shaft was made of barrels with windows cut in them, and the electric spark was transmitted. The experiment is claimed to have been a complete success.

PROFESSOR LESLEY, of the State Geological Survey of Pennsylvania, has published in a paper entitled "The Geology of the Pittsburg Coal Region," some interesting conclusions in respect to that important part of the country. The amount of coal in the

Pittsburg region is estimated at about thirty billion tons, an amount inexhaustible for centuries to come. At present about eleven million tons are annually taken away from this bed. This is nearly two-thirds of the entire output of Pennsylvania in bituminous coal, and one-third in anthracite. Professor Lesley is less hopeful in regard to gas and oil, however. "I take the opportunity," he says, "to express my opinion in the strongest terms, that the amazing exhibition of oil and gas which has characterized the last twenty years, and will probably characterize the next ten or twenty years, is nevertheless not only geologically, but historically, a temporary and vanishing phenomenon, one which young men will live to see come to its natural end." This opinion, is he affirms, one derived from long acquaintance with the subject.

TIERS-ARGENT is an alloy much employed in the manufactories of France for the manufacture of silverware. As indicated by its name, it consists of one-third silver and two-thirds aluminium, and is worked to great advantage both by reason of its cheaper price and its superior hardness; at the same time it is more easily pressed and engraved than silver-copper alloys. It will undoubtedly come into wide use for a great variety of tableware and household utensils as soon as our metallurgists are able to extract the exceedingly useful aluminium from the common clay with which it has hitherto declined to part company. Another very useful alloy, largely made in Germany, is produced by keeping for two or three hours at a bright-red heat a mixture of one part of powdered copper scales and two parts of bone-black. These unite to form a white electroplate.

THE prevalence of the tapeworm disease in South Australia has directed attention to its manifestation in dogs. It was found that the dogs of that country were to a great extent responsible, since of vagrant curs fully one-half possessed tapeworms, while a lesser proportion of the dogs of higher breed, and hence better cared for, were also affected.

ENTERTAINING COLUMN.

A FALSEHOOD travels now much faster than it did formerly. The invention of the telegraph accounts for the increased speed.

A SUFFERER by a late railway accident, rushing wildly about, was asked if he was hurt. "No," he said; but I can't find my umbrella."

AFTER wringing your friend's hand until he smiles all over, proceed with your burst of hospitality thus: "My dear fellow, if you are ever within ten miles of my house, I hope you will stay there!"

AT THE THEATRE.—*She:* "Don't you think something ought to be done toward uplifting the stage?" *He:* "Yes; or perhaps something toward the lowering of the bonnet would serve the same purpose."

A MAN with one eye laid another man a wager that he (the one-eyed) saw more than the other. The wager was accepted. "You have lost," said the first; "I can see two eyes in your face, and you can see only one in mine."

A BAD-TEMPERED old bachelor declares that an ox-team is singularly symbolic of courtship and marriage, for it begins with a bow, continues with a ring and a yoke, progresses with a tongue, and ends by presenting to the world the picture of a goaded pair.

"YES, SIR," repeated a man much given to talking, "I played with Irving for several years." "Why," said his friend, "I didn't know you were ever on the stage!" "Wasn't neither," rejoined the gossip; "I played marbles with him when we were boys at school."

HE WAS PRACTICAL.—*She* (emphatically): "How kind of nature to bestow upon the blind the faculty of distinguishing colors by the sense of touch!" *He* (philosophically): "Yes; but it's not altogether confined to the sightless. In this hard world a fellow needn't be blind to feel blue!"

A DOCTOR, on calling upon a gentleman who had been some time ailing, put a fee into the patient's hand, and took the medicine himself which he had prepared for the sick man. He was not made sensible of his error till he found himself getting ill and the patient getting better.

"I THINK I'll get out and stretch my legs a little," said a tall man, as the train stopped at a station. "Oh, don't," said a passenger, who had been sitting opposite to him, and who had been much embarrassed by the legs of his tall companion; "don't do that! They are too long already."

MACREADY tells of an actor who, in rendering the words, "the poisoned cup,' constantly said, "The coisoned pup," to the great delight of his audiences. On one occasion he rendered it correctly. Instantly there was an uproar, and he was not permitted to proceed till he had given "the coisoned pup," when he was rewarded with shouts of applause.

"I AM going to that show if it rains pitchforks," said Nellie, as she was calling on one of the neighbors. The shower came and Nellie did not go. The day after, she met the little girl she had called on, who twitted her about the show, saying, "I thought you were going if it rained pitchforks." "Well," said Nellie, solemnly, "it did not rain pitchforks, did it?"

"YOU don't love me—I know you don't," said a young married lady to her husband. "I give you credit, my dear, for a keen penetration," was his consoling reply.

"DOCTOR," said a man, "I am overworked. I must have rest. What would you advise me to do?" "Join the Knights of Labor and quit work," the doctor replied.

"YOU'VE eaten next to nothing," lisped Smithers, who was dining with his girl. "Oh, I always do that when I sit next to you," responded the young lady, pleasantly.

"SUSAN, bring me some water, with the chill taken off." "Yes, ma'am, directly." "Susan, what on earth keeps you?" "I'm looking for the chill, ma'am, and I can't find it."

"WHY in such a hurry?" said a man to an acquaintance, "Sir," he replied, "I have bought a new bonnet for my wife, and fear the fashion may change before I get home."

"WHY, Nellie," exclaimed a mother to her little girl, "how your hands *do* look! You never saw my hands as dirty as yours are!" "No; but your mamma did," was the prompt reply of the artless Nellie.

"WHAT amused me most at the opera," said an Arab chief who had been taken to hear "Faust," "was a musician in the orchestra seated a little higher than the rest, who performed on an invisible instrument with a stick."

A FRIEND called upon Rossini, the great musical composer, one day, and found him smoking. "Ah, that is good, said he, taking out his cigar-case; "you don't object?" "Pardon me," replied Rossini, placidly, "the smoke of my own cigar satisfies me."

CHARLIE isn't always correct in his pronunciation, but he is apt to state the facts very clearly. He rushed into the house the other day and cried: "Oh! 'ma, that tooth does ache. I'll bet it's ulsterated. It couldn't have been hotter even with an ulster on."

A LEARNED counsel was defending a female client charged with theft before Mr. Justice Byles, on the plea that it was really kleptomania. "Of course," he said, "your lordship knows what that is?" "Oh, yes," replied the judge; "and I am sent down here to cure it!"

"WELL, how did you like the sermon to-day?" "The sermon?" "Yes; you were at church, were you not?" "Why, yes, certainly." "Then you can tell me how you liked the sermon, I suppose. You heard it, didn't you?" "Heard it? Certainly not. I belong to the choir."

"MY love," said a wife, fondly, "am I not to have that beautiful dress pattern I spoke of?" "Be patient, my dear," he replied; "I will only say there is a surprise in store for you." "In store for me!" she snapped; "that's where it will stay. A real surprise would be something for me at home."

OVERHEARD COMING OUT OF CHURCH.—*She:* "Next time you want to sleep during the sermon you'd better go and sit with Mr. A., and lay your head on him. You'd be really comfortable then." *He:* "Why? Is Mr. A. nice and—ahem—soft?" *She:* "No; but he is one of the pillars of the church."

IN reply to old Tulliver's query, "Wat's Euclid?" it was replied: "It's definitions, and axioms, and triangles, and things. It's a book I have got to learn in—there's no sense in it." (Such is the view of some boys of the present day, as we discovered in looking over answers to a recent examination paper.)

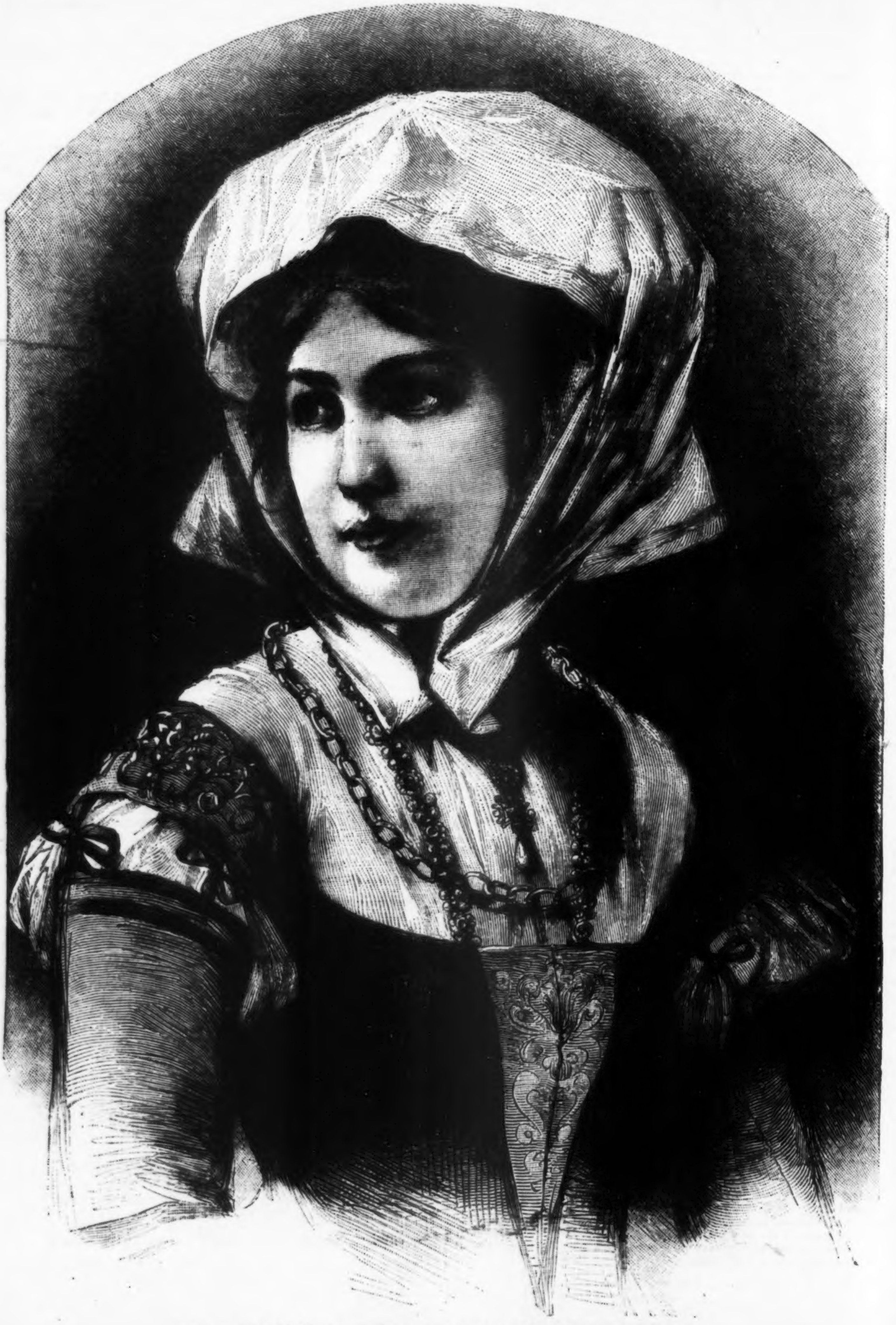
THERE was once a plain outspoken judge who, addressing the jury, said: "Gentlemen of the jury: In this case the counsel on both sides are unintelligent; the witnesses on both sides are incredible; and the plaintiff and defendant are both such bad characters, that to me it is indifferent which way you give your verdict."

ONE wet, miserable, foggy London day in Autumn Charles Lamb was accosted by a beggar-woman with, "Pray, sir, bestow a little charity upon a poor destitute widow woman who is perishing for lack of food. Believe me, sir, I have seen better days." "So have I," said Lamb, handing the poor creature a shilling, "so have I; it's a miserable day! Good-by!"

"WELL," said the persevering governess, "I will put it in another shape. If it takes one servant nine hours to do the entire housework of a family, how long will it take three servants to do it?" *Little Nell:* "Oh! I can answer that. I heard mamma speak of it this very morning." *Teacher:* "Well, how long will it take them?" *Little Nell:* "Three times as long!"

A PERSONALITY HE COULD NOT STAND.—"Yes," said the doctor to an editor consulting him, "you need exercise; your blood is sluggish, your circulation is weak—not what it ought to be." "Circulation weak! Not what it ought to be!" repeated the editor, warmly. "Why, sir, I wish you to understand that our circulation is double that of any of our contemporaries!"

METAPHORS THAT RUN AWAY.—The English Bar is familiar with some choice specimens of unaccommodating metaphor—as, for instance, the celebrated opening. "These gentleman have fished about until they have found a mare's nest, and on that they hang their bill." The latest contribution in this line comes from a detective agency, which states that its officers "thought they had a good clew, but it exploded."



YOUNG GERMAN LADY, SIXTEENTH CENTURY.—FROM A SKETCH BY J. B. WEHLE.

XUM